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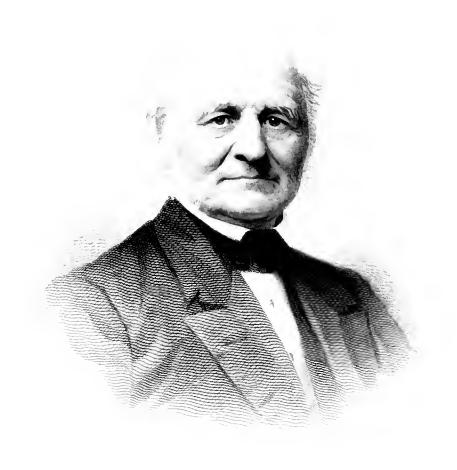


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# AMERICAN POMOLOGICAL SOCIETY.

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# PROCEEDINGS

OF THE

# THIRTEENTH SESSION

OF THE

# American Aumological Society

HELD IN THE CITY OF

# RICHMOND, VIRGINIA,

SEPTEMBER 6, 7 & 8, 1871.

PUBLISHED BY THE SOCIETY.

CLEVELAND, OHIO.

FAIRBANKS, BENEDICT & CO., PRINTERS, BANK STREET.

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# AMERICAN POMOLOGICAL SOCIETY.

# CIRCULAR.

In conformity with a resolution adopted at the last meeting of this NATIONAL ASSOCIATION, the undersigned hereby give notice, that its Thirteenth Session will be held in Assembly Hall, Eighth Street, between Grace and Franklin Streets, in the City of Richmond, Virginia, on the sixth, seventh and eighth days of September, 1871. All Horticultural, Pomological, Agricultural, and other kindred institutions in the United States and British Provinces, are invited to send delegations, as large as they may deem expedient; and all other persons interested in the cultivation of fruits are invited to be present and take seats in the Convention.

The coming session promises to be especially interesting, held, as it will be, in conjunction with the exhibition of the Virginia Pomological and Horticultural Society, and at a great central point, farther South than any previous session of the institution. This meeting will, therefore, it is believed, be one of the most useful, in a national point of view, that has ever been held by the Society, thus affording an opportunity not only to examine the fruits of the South, in comparison with those of the North, the West and of the Pacific Slope, which it is expected will be freely contributed, but also to foster and perpetuate the amicable and social relations which have heretofore existed between the members of the Society, and to widely diffuse the result of its deliberations, for the benefit of our constantly expanding territory.

The climate of Virginia and adjacent States is believed to be admirably adapted to the culture of fruits, especially the pear, the grape and the strawberry. It is, therefore, hoped that there will be a full attendance of delegates from the South and the West, as well as from other quarters of our country, thereby stimulating more extensive cultivation, upon which the North are so largely dependent for early supplies, thus, also, by the concentrated information and experience of cultivators, to aid the Society in completing the Second Division of its Catalogue of Fruits, being that part which pertains especially to the Southern States. This will be one of the prominent subjects which will come before the Society, and we, therefore, respectfully invite the various State and local Committees to report to P. Barry, Chairman of the General Fruit Committee, agreeably to the constitution of the Society, such information and lists of fruits as may aid in determining what varieties are best adapted to their several localities. These reports should be transmitted by mail to F. R. Elliott, Secretary, Clevetand, Ohio, as early as possible.

Arrangements have been made with the various railroad companies terminating in Richmond, to return all members and others free of charge, who have paid full fare in coming, and who exhibit

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certificates of the Treasurer that they have attended the sessions of the Society. Similar arrangements can undoubtedly be made by the various delegations, with roads in their localities.

Members and delegates are requested to contribute specimens of the fruits of their respective districts, and to communicate in regard to them whatever may aid in promoting the objects of the Society and the science of American Pomology. Each contributor is requested to prepare a complete list of his collection, and to present the same with his fruits, that a report of all the varieties entered may be submitted to the meeting as soon as practicable.

Packages of fruits, with the name of the contributor, may be addressed as follows: "American Pomological Society," care of H. K. Ellyson, Secretary Virginia Horticultural and Pomological Society, Richmond, Va.

All persons desirons of becoming members can remit the admission fee to Thomas P. James, Esq., Treasurer, Philadelphia, who will furnish them with Transactions of the Society. Life Membership, Ten Dollars; Biennial, Two Dollars.

MARSHALL P. WILDER, PRESIDENT,

Boston, Mass.

F. R. ELLIOTT, STORETARY, Cleveland, Ohio.

Although not heretofore a feature of the Society, voluntary offerings of individuals for Premiums came forward, and the following circular was added to the circular calling the meeting of the Society:

# PREMIUMS.

To be awarded at the Meeting of the American Pemological Society, in Richmond, Va., Sept. 6 to 8, 1871.

The following premiums are subject to the general rule of restriction, where objects are not deemed worthy of the same. All fruits must be grown by the exhibiter.

The Virginia Pomological and Horticultural Society, for sundries, offer One Hundred and Fifty Dollars.

The Virginia State Agricultural Society offer One Hundred Dollars for the best collection of fruit, embracing Apples, Pears, Peaches and Grapes.

Effwanger & Barry, of Rochester, New York, offer Fifty Dollars for the largest and best collection of Apples, not less than fifty varieties, three specimens of each.

Marshall P. Wilder, of Boston, Mass., offers Fifty Dollars for the largest and best collection of Pears, not less than tifty varieties, three specimens each.

Charles Downing, of Newburgh, New York, offers Fifty Dollars for the largest and best collection of American Grapes, not less than twenty varieties, three bunches each.

Thomas P. James, of Philadelphia, Pa., offers Thirty Dollars for the largest and best collection of Peaches, not less than ten varieties, of six specimens each.

General R. L. Page, Norfolk, Va., offers Ten Dollars or a Medal for best half bushel of the Flowers Grape.

- G. F. B. Leighton, Norfolk, Va., offers Twenty Dollars or a Medal, at the disposition of the American Pomological Society.
- C. D. Barbot, Norfolk, Va., offers Twenty Dollars or a Medal for best dozen bottles of Scuppernong Wine.

CIRCULAR. 7

L. Berkley, Norfolk, Va., offers Ten Dollars or a Medal for best dozen bottles of the Flowers Grape Wine.

W. H. C. Lovett, Norfolk, Va., offers Ten Dollars or a Medal for best Dried Figs—cured within the territory of the Society.

Hon. Jno. B. Whitehead, Norfolk, Va., offers Twenty Dollars or a Medal for best half bushel of Scuppernong Grapes.

W. S. Butt, Norfolk, Va., Two Premiums of Five Dollars each or Medals—one for best Figs; the other at the disposal of the Society.

By H. M. Smith, Richmond, Va., Ten Dollars or a Medal for the best half bushel of Cider Apples.

By Downward, Anderson & Co., of Richmond, Va., Ten Dollars or a Medal for the best twelve bunches of Norton Grapes.

By Chas, T. Wortham & Co., of Richmond, Va., Ten Dollars or a Medal for best twelve bunches of \*Delaware Grapes.

By S. Zetelle, of Richmond, Va., Five Dollars or a Medal for best twelve specimens of Peaches.

By Messrs, Rudolph & English, of Richmond, Va., Five Dollars, at the disposal of the Society.

By Southern Fertilizer Co., Twenty Dollars, at the disposal of the Society.

By Messrs. Walker, Evans & Cogswell, Charleston, S. C., one year's subscription to the Rural Carolinian for each of the following: I. The best show of Apples, not less than ten varieties, grown south of Virginia. 2. The best show of Yellow Horse Apples. 3. The best show of Meigs Apples. 4. The best show of Buff Apples. 5. The best show of Batcheler Apples. 6. The best show of Nickajack Apples. 7. The best show of Chestatee Apples. 8. The best show of late Peaches, grown south of Virginia. 9. The best show of Hebe Pears. 10. The best show of Louis Bonne de Jersey Pears. 11. The best show of Bartlett Pears. 12. The best show of Duchesse d'Angouleme Pears. 13. The best show of Seckel Pears. 14. The best collection of Figs, not less than six varieties. 15. The best box of Dried Figs, cured in the South. 16. The best plate of Celestial or Sugar Figs. 17. The best plate of Pomegranates. 18. The best show of Running Mangoes, (Sechium edulis.) 19. The best jar of Pickled Olives, grown and prepared in the South. 20. The best new Seedling Grape, originated in the South, and not before exhibited. (See Rural Carolinian for August.)

J. S. Downer & Sons, of Fairview, Todd Co., Ky., offer Twenty-five Dollars for the best Apple for general cultivation in Kentucky.

Smith, Clark & Powell, Syracuse, New York, offer Ten Dollars for the best late Winter Pear, character and productiveness to be considered, as well as the keeping quality of the fruit.

Smith, Clark & Powell offer Ten Dollars for the best ten varieties of Pears, three specimens each.

D. D. T. Moore, of Rural New Yorker, offers Ten Dollars for the best ten varieties of Apples for general cultivation.

The above Figs, Grapes and Wines, entered for premiums, to be the property of the Society, for the use of those members residing in those localities where they are not grown.

The whole amount of premiums, general and special, offered by societies and individuals in Virginia, has been generously placed by them at the disposal of the American Pomological Society.

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# AMERICAN POMOLOGICAL SOCIETY.

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# Biennial.

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WILLIAM BROCKSBANK Hudson New York
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J. C. Brosius Cochransville Pennsylvania
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STEPHEN HOYT New Canaan Connecticut
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W. H. Swan
E. W. SYLVESTER, M. D. Lyons New York
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Isaac P. Trimble, M. D. Newark New Jersey
H. C. WILLIAMSViennaVirginia
Louis Winter Lenzburg Illinois
ALEXANDER YOUNG Newburgh New York



# PROCEEDINGS

OF THE

# American Pomological Society.

In accordance with the preceding call, members and delegates representing forty. three States and Territories, and twenty-six associations for the promotion of Horticultural knowledge, assembled in the hall of the Exchange Hotel, at Richmond, Va., on the morning of the 6th of September, at 9 o'clock, 1871.

The President, Hon. Marshall Pinckney Wilder, of Massachusetts, was introduced to the meeting by Hon. Joel Parker, of Mass., with a few remarks, and, after taking the chair and calling the Convention to order, introduced John M. Allan, Esq. President of the Virginia Horticultural and Pomological Society, who addressed the assembly, and said that no more pleasant duty could have devolved upon him, than that of welcoming them to Richmond. Two years ago the Society of Virginia Pomologists had thanked the American Society for the promise to come, and to-day he had to thank them, in behalf of his Society, for coming here. He was aware of the pressing business which awaited the attention of the national body thus convened, and it was not his desire further to detain them than to extend a cordial welcome. He hoped that their sessions would prove harmonious, prosperous and pleasant, and, again welcoming his friends from all parts of the country, took his seat.

Hon. Marshall P. Wilder, President of the American Pomological Society, then replied, thanking Mr. Allan for his cordial reception and welcome, and, on behalf of the Society, accepted it with equal warmth and feeling. He was glad to see so many representatives of this great country—men from the "Everglades of Florida" to the cold country of the far North. It was a pleasure to him to be in the midst of such an assemblage; and from whatever clime they came, he welcomed them from his heart. He appreciated the hospitality already shown the American Pomological Society, and was assured that its sessions would not only prove harmonious and pleasant, but, when ended, and each member at his home, he would have something to remember which

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would ever prove agreeable. As there would probably be much more to be said in this connection, he would not longer detain the regular business of the Society, which was, first, the appointment of committees for dispatch of business, as follows:

ON CREDENTIALS—Wm. Saunders, of the District of Columbia; John C. Hovey, of Massachusetts, Henry Ellwanger, of New York; John Morton, of Virginia.

ON BUSINESS—Parker Earle, of Illinois; P. T. Quinn, of New Jersey; R. Buist, of Pennsylvania; Hon. W. Schley, of Georgia; Dr. Wm. Howsley, of Kansas.

ON NOMINATIONS OF OFFICERS—J. M. Allan, of Virginia: W. C. Barry, of New York; John Saul, of the District of Columbia; Hon. Joel Parker, of Massachusetts; Joshua Lindsey, of North Carolina; John L. McIntosh, of Ohio; W. C. Flagg, of Illinois; Thos. Mechan, of Pennsylvania; J. S. Downer, of Kentucky; Wm. Parry, of New Jersey; Dr. Wylie, of South Carolina; Wm. Heaver, of Tennessee; P. J. Berckmans, of Georgia; Edwin Hoyt, of Connecticut; Mark Miller, of Iowa; R. W. Furnas, of Nebraska; Dr. J. S. Curtiss, of California; Col. Hardee, of Florida; Silas Moore, of Rhode Island; Col. Langdon, of Alabama; Juo. B. Dillon, of Indiana; and A. Lindeman, of Michigan.

ON MAKING RECORD OF FRUITS EXHIBITED—J. E. M. Gilley, of Massachusetts: B. K. Bliss, of New York; and Dr. Jas. F. Johnson, of Virginia.

During the absence of the Committees relative to Business, Permanent Officers, etc., Hon. Joel Parker, of Boston, offered a resolution, as follows:

That the price of membership of this Society shall be, from this time, four dollars (\$4) biennially, and after this session, twenty dollars (\$20) for life; and by this resolution the form of the Constitution of the Society shall be changed so to read.

The Secretary records that the original resolution made the biennial three dollars, instead of four dollars, but that discussion brought it to the price of four dollars, and he so reports it as the decision of the Society

The resolution clicited much discussion, and was compromised, as it were, from a three dollar to four dollar biennial, and from a twenty-five dollar to a twenty dollar life, fee, and was then ununimously passed.

The above had remarks, pro and con, from Messrs, Bragdon, James, Wilder, Hogg, Allan, Parker, Elliott, Hardee, Langdon, Schley and Campbell.

The Business Committee then reported, as follows:

### ORDER OF BUSINESS.

Hours or Meeting.—Wednesday, nine o'clock in the morning and three o'clock in the afternoon; Thursday, ten o'clock in the morning and three o'clock in the afternoon; Friday, nine o'clock in the morning and three o'clock in the afternoon.

Rules for Speaking.—Five minutes; and no person to speak more than twice on the same subject, without leave.

Essays.—All essays to be referred to committees, but not read before the Convention.

Wednesday.—At three o'clock in the afternoon, address of the President; at the close of which, election of officers. Then reading of the Treasurer's report.

Thursday—At ten o'clock in the morning, discussion in regard to place of holding next meeting, and in regard to the form of a permanent catalogue.

Discussion on apples suited to general cultivation in the Southern States. The discussion to be opened by Southern members, and they requested to speak only of varieties well known and tested. Apples to be followed by pears, peaches, plums, grapes, apricots, nectarines, etc.

Thursday.—At three o'clock in the afternoon—Reports of committees. Introduction of subject, by members relating to pruning, diseases, etc.; all of which to be transferred to committees for report, after which discussion continued.

Friday.—At nine o'clock in the morning—Reports of committees. Resolutions. Incidental remarks and suggestions. Discussion on fruits continued.

Friday.—At three o'clock in the afternoon—Resolutions. Discussions continued. Adjournment. Wm. Schley, Secretary.

### INVITATION AND EXTENSION OF COURTESIES.

The following invitation was at this time received, read and accepted:

Richmond, Va., Sept. 6, 1871.

Hon. MARSHALL P. WILDER,

President American Pomological Society:

DEAR SIR: If it suits the convenience of your body, the Mayor desires to extend to it, in the hall of the House of Delegates, at half-past twelve o'clock to-day, a cordial welcome to the city of Richmond.

On behalf of the City Council and the Committee of Reception, I beg to extend to you and your associate delegates an invitation to participate in an excursion down James River, on the steamer Palisades, this afternoon, leaving the wharf at Rockett's, at half-past four o'clock.

I am your obedient servant,

W. B. Isaacs,

Chairman Committee of Reception, etc.

Committees on Premiums and Fruits Exhibited were then announced by the President,\* and the Society adjourned in a body to the hall of the House of Delegates, where they were addressed by Mayor Keiley, as follows:

Mr. President and Gentlemen: It is a pleasant service to be charged with extending you, as I am happy to do, a very cordial welcome to our city, on behalf of the authorities and people of Richmond, and I embrace the occasion also to congratulate my fellow-citizens on the presence among them of so large and intelligent a body of gentlemen from all parts of our common country, engaged in a duty so beneficent that their deliberations will provoke hostile criticism in no quarter.

The union of science with labor is among the most characteristic peculiarities of our age. The time was when philosophy marched along the highways of the earth wrapped in a lordly pride, which disdained all association with labor, and if it deigned to cast a look across the hedge that divided it from the field and the garden, it was to vent its scorn on the dusty hand and less intelligent brain there engaged. From this two great evils resulted: First, agriculture and every other form of fruitful labor lost the important aid of philosophy;

<sup>\*</sup> The committee names will be found appended to their reports, on another page.

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and, secondly, philosophy itself lost the powerful stimulus which profit lends to every development of human effort.

Almost within our memories all this has been changed; the white hand has clasped the brown; the teeming brain has grasped the plow, the pruning-hook and the sickle, and those great agencies for the betterment of our race whom God hath joined, are no longer by man to be sundered. And with what splendid results on every hand! Surely, if he may be claimed to be a benefactor of his race who makes two blades of grass grow where only one grew before, your praise should be a thousand-fold greater, who have taken the bitter fruit of a thorny tree in the wilds of Eastern Europe, unfitted for food for man or beast, and therefrom have developed the most delicious fruit of our day, in more than five hundred varieties. [Applause.] And lastly, gentlemen, I welcome you with peculiar pleasure, as this is your first assembling in a Southern city. Let me indulge the hope that you have not only brought hither your persons and the superb results of your skill, but that you have come among us bringing your hearts likewise. [Great applause.]

When the late unhappy strife was ended, the first act of reconstruction was passed by nature. Our brother-blood was still boiling in hostile veins; the clenched hand was still unrelaxed, and the passions of war were still rife, when from a thousand skies and hillsides and athwart a thousand plains came the generous sunlight, the gentle rain and the tempering winds, filling up the gaping ritle-pits, battering down the sharp escarpments of frowning forts, blotting out with waving grain the fierce scar of shot and shell, crowning battlements with fragrant flowers, and weaving a beautiful carpet of green over the scenes and sites of war's worst devastations. [Applause,] May it be your happy fortune and high privilege, gentlemen, you who labor with Nature in so many pleasant and profitable fields, to lend her a helping hand and a willing heart in this, the noblest field of all! [Loud and continued applause.]

### PRESIDENT WILDER'S RESPONSE.

### President Wilder responded to the Mayor, as follows:

Mr. Mayor: In behalf of the American Pomological Society, and in my own behalf, I tender to you my grateful acknowledgments for your gracious welcome and most eloquent words in which you have addressed us. I am happy to be here—we are happy to be here in the capital of the old Dominion, a State so distinguished for the production of illustrious men-of Washington, Jefferson, Madison, Monroe, Harrison and Tyler-all of whom have filled the highest station in the gift of the people; John Marshall, Patrick Henry and Henry Clay, names that will ever constitute a galaxy of talent to fill the brightest page in the annals of American history. We come from different and widely distant sections of our country. I come from the cold and sterile soil of New England, where we have not the luxuriant soil of the West, nor the warm, genial, sunny clime of the South. But, sir, we have hearts as warm as yours; and although granite and ice enter largely into our exports, you, sir, we are most happy to be here to meet our Southern brethren on Southern soil, to concert measures for the promotion of the object of our Society—the extension of fruit culture throughout the length and breadth of our land. With the natural advantages which the South possesses, and especially your own Virginia, upon which the North depends so largely for early fruits, the time is not far distant when fruit culture will constitute a source of revenue scarcely second to any product of the soil. Our Society is now in session, our

time is very precious, and, with the hope that you and your board will honor us with your presence at our meetings, I beg you will allow us to retire.

President Wilder was frequently applauded, and at the close of his speech, as he extended his hand to the Mayor, there was a call for "Three cheers for Massachusetts and Virginia shaking hands," which were given with great enthusiasm.

### AFTERNOON SESSION.

At three o'clock in the afternoon, the Society again met, and listened to the following address, pronounced by President Wilder:

Genllemen and Friends of the American Pomological Society: Twenty-three years have nearly elapsed since the organization of this Society, in the city of New York. Held as our meetings have been, in different and widely distant parts of our country, I deem it proper very briefly to allude to its history, objects and progress. Especially is this desirable as a means of information to such southern portions of our Union as may not have been conversant with the proceedings of the Society. Its object is to advance that most interesting and delightful pursuit, the cultivation of fruits; to promote and perpetuate a cordial spirit of intercourse between pomologists; to compare fruits, and opinions concerning them; to settle doubtful points in pomology, and to establish a standard for every section of this great Western Continent. How well this has been done, the Society need no better testimonial than is furnished by its published transactions, the wide-spread influence it has exerted, not only in our own, but other portions of the world, and especially by this grand assemblage of American fruits and American men. Many of the noble men who aided in the establishment of this Society have ceased from their labors—Downing, Prince, Saul, Hodge, Bergen, Underhill, of New York; Brinckle, of Pennsylvania; Walker, French, Crapo and Lovett, of Massachusetts; Monson, of Connecticut; Ernst, of Ohio; Hancock and Reid, of New Jersey; Kennicott, of Illinois; Eaton, of Rhode Island; White, of Georgia; Pierce, of the District of Columbia. These, and other associates of fair fame, have gone to their reward; but we rejoice that some still live who, from the earlier years of our history, have distinguished themselves as the untiring friends of our institution; who, by their efficient services and wise counsels, have contributed to its prosperity; some of whom are here to-day, to rejoice with us in the progress of our science and the perpetuity of our institution.

Nor would we forget the eminent services and devotion of others of later days, to whom we are under equal obligations for the extension and influence of our Society, whose efforts have brought together the cultivators of fruits from the most distant portions of our country, thus making our institution what it was designed by its founders to be—a truly national association, where the knowledge of one becomes the property of all; an association that should constitute a compendium of experience, and where, without regard to religious creed or sectional prejudice, a community of interest, enterprise and action might be established for the promotion of a great source of national wealth and human happiness.

In order to promote the convenience of all, to distribute its favors and increase its influence, the Society has wisely held its sessions in different and distant States of the

Union. New York, Pennsylvania, Ohio, Massachusetts and Missouri have extended hospitalities to the Society, and some of these States have been repeatedly favored with the presence of its members, and the privilege of listening to their discussions. And now I congratulate you most sincerely upon the auspicious circumstances which enable us to meet in this city, among our Southern brethren, who have honored us with so cordial a welcome, and so large a representation of her men and her resources, here, in the capital of Virginia, a State so renowned as the mother of Presidents, and the home of some of the most distinguished patrons of American agriculture, among whom may be named Washington, Jefferson and others, who will ever be remembered as benefactors of their race.

I have so often addressed you on topics connected with the practical labors of our calling, that it can scarcely be anticipated that I should have anything new to offer for your consideration, especially in the presence of so many whose research and experience is fully equal to my own. I know, too, how precious our time is, and I should not attempt it were it not a duty enjoined by the constitution of the Society. This duty will be performed in as brief a manner as its importance will permit.

I would, therefore, suggest that it is desirable for us to gather up for future use the lessons which have been acquired by the experience of the past. We have been so busy in accumulating knowledge in the various branches of our culture, that we have had no time to look back and to systematize the inferences and deductions to be drawn from our operations. But we believe the time has now come when we should pause, and survey the field, and make a review of the lessons which science has taught; for science is but a statement of these lessons—experience systematized and trained for progress. It is the grains of sand that roll up the mountain, the drops of water that make the ocean, and it is lesson upon lesson, fact upon fact, which must build up the science we wish to create. Nothing in the present age astonishes us more than the wonderful power of association—the centralization of thought and action for the promotion of particular objects, thus collecting the experience of individuals, and diffusing this knowledge for the benefit of the world. How clearly is this seen in the operations of our own Society- how great the changes, and how rapid the progress since its formation! Then its list of members was one hundred and seven; now its roll contains the names of three hundred and eleven persons. Then its sphere of operations was limited by the boundaries of a few States; now its field extends from ocean to ocean, from the Provinces to the Gulf, and wherever the foot of civilization rests in our broad domain. Nor is it too much to say, that in this space of time more progress has been made in the science of pomology than in the whole period since the settlement of our country. Never before was the interest so engrossing or so widely extended. By publications, correspondence and the remarkable facilities for interchange and intercourse, the enterprise of cultivators is kept constantly on the alert; and instead of useless discussions of other subects, the pomologist finds all his time occupied in efforts for improvement.

How surprising the changes which have taken place during the existence of this Society! States and sections of the Union which were scarcely known by name, now contribute noble fruits to grace our exhibitions, and noble men to join us in efforts for the promotion of the public good; and by the wonderful achievements of science and the golden chain of commerce, a reciprocal exchange is made of our fruits, distances are almost annihilated, and where fruits were only to be seen in our markets at their peculiar season, they are now found throughout the entire circle of the year. And by the arts of preservation, the seasons of our fruits are further prolonged, until those of winter even linger in the lap of summer. Thus our choicest varieties are successively matured; thus distant markets are brought near

together, so that the apple, the pear and the grape from the South and West meet in the Northern clime of New England in midsummer; and California, Kansas, Nebraska and Illinois compete at the same time with Virginia, the Carolinas and Georgia, in our Northern markets.

### LESSONS OF EXPERIENCE.

### THE INFLUENCE OF WARM, DRY SEASONS.

Among the lessons which we have learned, we may mention, as settled and acknowledged principles, the following:

The observations of the last few years, under the influence of warm, dry seasons, would appear to have established the principle that such weather, (without excessive drought,) especially in the earlier part of the summer, is more favorable to the perfection and ripening of fruits, particularly grapes, than cold, wet seasons. The fact is prominently shown in California, as we have witnessed by personal observation; and is especially to be seen in the cultivation of the grape there, and also in Europe and in our Northern States, where, under the influence of such seasons, neither the vine nor its fruit is affected by disease of any kind. These conditions we have noticed are also peculiarly advantageous for the formation of fruitbuds, and the storing up of the necessary perfected food for a future crop, and for the ripening of the wood, so necessary that it may endure the winter with safety.

### DRAINING OF FRUIT LANDS.

In conformity with the foregoing remarks, we see the importance of thorough draining of our fruit lands, which produces in soils not naturally possessing them, the conditions of warmth and dryness which we have named, thus rendering the condition of the earth, in respect to warmth and dryness, analogous to that of the air, of the importance of which we have before spoken. Besides these advantages, is the thorough aeration of the soil, whereby it is enabled to absorb fertilizing matter from the atmosphere, rain and snow, and the moisture evaporated from the springs below. Thus, paradoxical as it may seem, the same means which guard against excessive wet, also serve to supply moisture in excessive droughts. How aptly does the poet describe this condition:

"In grounds by art made dry, the watery bane Which mars the wholesome fruit, is turned to use, And drains, while drawing noxious vapors off, Serve also to diffuse a full supply."

### PREPARATION AND CULTIVATION OF THE SOIL.

It seems scarcely necessary in this presence to say that thorough preparation and enrichment of such soils as are not already rich, is essential. Ordinary farm culture will not produce the highest class of fruits; they must have garden culture, and with this they never fail. After this thorough preparation, the cleaner the culture the better, at least in our older States, where the soils have been depleted by cropping. But one of the lessons which experience has taught us most impressively is that, contrary to our former views, this after cultivation should be shallow, so as not to injure the roots, but to preserve them near the surface.

### MANURES AND THEIR APPLICATION.

The subject of mannes is a most important one, and every year becoming more so. The supply of manure, in the older part of our country, is unequal to the demand, and every year increases the disparity. What would be our feelings if the supply of wheat, on which we depend for our daily bread, were inadequate to the demand? Yet men are not more dependent for life upon their daily bread, than our fruit crops upon the food which is supplied to them in the form of manure of one kind or another. To supply this want, we shall be compelled to rely, in great measure, upon artificial fertilizers, and chemistry has not yet taught us, as it will doubtless in the future, how to supply the wants of our fruit crops with certainty and abundance. But we cannot too often or too forcibly impress upon the minds of all cultivators, the sacred duty of saving every particle of fertilizing material, and applying it in such manner as will produce the utmost effect. And on this last point, the lesson which experience has taught us is, that manure applied to fruit trees should be either in the form of a top-dressing, or as near the surface as is consistent with the composition of the soil and the preservation of its fertilizing elements.

#### MITLCHING.

While on this subject we will add, as another of the lessons of experience which may be said to be fixed—the advantage of mulching for dry seasons and soils, whereby the temperature and moisture of the soils are kept uniform and the fertilizing elements in a soluble state, an essential condition for the production of perfect fruit.

#### THENNING OF FRUIT.

This is another lesson which we have learned, and the necessity of which we have often endeavored to impress upon cultivators, and which every successive season teaches with stronger emphasis. It is absolutely necessary for all who send fruit to market to send large fruit, and the markets are constantly and progressively requiring large and fine fruit. Even the Seckel pear, which once commanded in Boston market the highest price, will not now, unless of extra size, sell for any more than, if as much as, common varieties of larger size. A medium sized fruit, or even one of smaller size, may be more economical for use, but until some decided change in the preferences of the majority of purchasers shall take place, large fruit will sell better than small. To produce this, the fruit must not only have good cultivation, but must be thinned; and we agree with Mr. Meehan, that "one-half the trees which bear fruit every year would be benefited by having one-half the fruit taken off as soon as it is well set, and that the overbearing of a tree will in a few years destroy it." We may lay it down as a certain rule, that excessive production is always at the expense of both quantity and quality, if not in the same season then in succeeding ones, for when branch is contending with branch, leaf with leaf, and fruit with fruit, for its supply of light and food, it would be indeed an anomaly in nature if this should not result in permanent injury to the trees as well as to the annual crop.

### INSECTS AND DISEASES.

The subject of insects and diseases is daily attracting more attention, for their depredations are daily becoming a greater evil, and the importance of entomological investigation is every day more plainly seen. It is less than fifty years since Dr. Harris first published his work on "Insects Injurious to Vegetation," and great is the debt of gratitude which we owe to him and to the succeeding investigators who have given their lives to studying the habits of these little "creeping things which be upon the earth," that they may teach us how to destroy those which prey upon our trees, and to distinguish our friends from our foes.

Every plant imported from abroad brings with it a new insect or disease, and the dissemination of new plants and varieties, without which there can be no progress in horticulture, inevitably disseminates their insect enemies. On this subject the words of Edmund Burke are appropriate: "The most vigilant superintendence, the most prompt activity, which has no such day as to-morrow in its calendar, are necessary to the farmer;" and we may add, still more to the fruit grower, and tenfold more necessary in combating our insect enemies. The neglect of battling with these vile creatures, is the great bane to successful cultivation; but as long as moral evil exists in the world, so long may we expect there will be evil in the natural world, and he who is not willing to contend against both, is not worthy of the name either of cultivator or of Christian.

We belong to that class who have faith in the ultimate triumph of good over evil in the moral world, and our faith is not less strong that the insect plagues shall, if not exterminated, at least be subdued, so that the labor of keeping them so far in check, that no material harm shall be caused by them, will be comparatively easy. We have discovered means for preventing the ravages of the currant worm, curculio, canker worm, caterpillar, melon bug and aphis, and the mildew and other diseases of our vines. If we can do this, is it not reasonable to suppose that we can discover remedies for, or the means of preventing, all the diseases and depredations that vegetation is liable to? Is it consistent with that Divine economy, so benevolent in all its ways and works, to believe that this fair creation has been spread out only to be destroyed; that seed-time should be promised and the harvest withheld; and from year to year our hopes deferred and our hearts made sick? Is it in harmony with that Divine Providence which created all things and pronounced them very good?

If any one say it is of no use to contend with these hordes of vile creatures, or the disappointments upon which all culture is incident, let him remember that it is the mission of life to struggle against and overcome them. Instead of fretting and groaning over these evils, let us battle with them and conquer them. Thus shall we gather the rich fruits of our industry, and

"Where some would find thorns but to torture the flesh, We'll pluck the ripe clusters our souls to refresh."

But some one replies, let Nature do this, let Nature perform her perfect work. True, but Nature brings us weeds, thistles and thorns, injurious insects to vegetation, as well as those that are useful; and we were placed in this world, not merely to assist nature, but to meet with and overcome the obstacles which she sometimes places in our path—to elevate her to the highest and noblest purposes of her creation.

Many of the difficulties and privations we endure, if met and conquered, will prove blessings in disguise. It is labor of mind as well as body; it is work, work, work, that makes men strong. Work is the great engine that moulds and moves the intellect, enterprise and destiny of the world; work is the greatest temporal boon bestowed on man; work is the heaven-appointed means of advancement to a higher state of perfection; and in no profession is this more apparent than in the calling of the pomologist. This idea is well expressed in the following lines, illustrative of the blessings of labor:

"The first man and the first of men, Were tillers of the soil; And that was mercy's mandate then Which destined man to toil." If man can seize the lightning in his hand and make it work for him in earth, air or water; if he can descend into the secret laboratory of Nature, and learn the constituents of soils and manures, and their adaptation to each other; if he can learn how she prepares the appropriate food for all vegetable life, from the humblest plant clinging close to the bosom of earth, only blooming to die, to the lofty Sequoia, rearing its head to heaven and braving the tempests for thousands of years; if the physician can discover the agents which generate disease in the animal kingdom, and prescribe antidotes and remedies for each, may not the cultivator acquire a knowledge of the diseases which affect his trees and plants, and how to cure them?

Is there any element in nature which man cannot make subservient to his use? Is there any disease for which nature has not provided a remedy! Is there any enemy to vegetation that cannot be overcome! True, there are many things of which we know but little, and which require long and careful study; but there are others which are well established, and which one fact may demonstrate as well as a thousand.

#### SHELTER.

The necessity of shelter was not as soon perceived as some of the other lessons which I have named; yet, with perhaps the exception of a few favored spots, its importance is year by year becoming more generally appreciated, especially on our open prairies and in the northern and northwestern portions of our country. The fact is established, that the removal of forests diminishes the quantity of rain, increases the evaporation of moisture, reduces the temperature, and subjects our fruits to greater vicissitudes, so that the peach and many of our finest pears can be no longer cultivated at the North, except in gardens or sheltered places. The importance of shelter was well understood as long ago as the time of Quintinye, who, in his work on gardening, gives full directions for planting trees for shelter. This was in a country long settled and denuded of its forests; and though our ancestors planting fruit trees in a virgin soil, thickly covered with wood, failed to perceive its necessity, we, in our older States, who have come to much the same conditions as existed in the time of Quintinye, experience the same want.

There may be exceptions to this rule, as in the South, where the fruit season is warm and dry, producing similar conditions to those afforded by shelter under glass. We may find varieties, and probably shall, adapted to exposed situations; but at present the larger majority of our finer fruits will be benefited by the shelter of belts of forest trees. We are glad, therefore, to see the recognition of the advantages of forest trees on the part of the managers of our Pacific railways, not only as affording shelter, but as collecting moisture from the atmosphere, and so rendering available vast regions previously uninhabitable from drouth. This good work has already been commenced on the line of the Kansas Pacific Railroad.

### METEOROLOGY.

Besides the lessons which experience has already taught us, permit me to mention one which pomologists ought to learn, and which, from present indications, I have no doubt they will learn. The pomologist should have a better knowledge of the science of meteorology than we now possess. The action of light and heat: the influence of the winds, of frost, fog, water and the electrical condition of the air and earth, have a most important bearing, and we believe that when our science shall have attained to its greatest perfection, there will be a discreet classification of our fruits, assigning to each its proper soil, location and aspect. We must not expect to alter the laws of nature, but to conform to them. We do not expect

to restore the lost Pleiad, nor do we expect to find any supernatural means whereby improvement and progress can be attained, without mental or physical exertion, but we should endeavor to understand some of the workings of that mysterious machine which generates and perpetuates all vegetable life. True, the "wind bloweth where it listeth," as of old, but it seems probable, if not certain, from the investigations made at Washington, that man cannot only tell from whence it will come and where it will blow, but where the sun will shed its rays and the clouds diffuse their showers, and the time may come when the laws which govern the weather may be settled with nearly as much certainty as those which now govern the calculations of the astronomer.

What wonders has science wrought in modern times, but these are only the rudiments of that great plan which Providence has established for the happiness of mankind. "These are but parts of His ways," which we now see, glimmerings of that boundless exhibition of power, wisdom and goodness which shall culminate in the perfection of all created things.

### ORIGINATING NEW VARIETIES.

I commend to you again, as I have done in my former addresses, and shall continue to do while I live, the important and benevolent work of originating new varieties of fruit, both as a means of improvement, and as a substitute for those which have experienced the decline incident to all things of human origin. Our country, and in fact the whole world, has been so thoroughly explored, that we can scarcely expect to discover any very important addition to accidental varieties. Our main source of improvement, therefore, is to be found in the production of new kinds from seed, and I again urge upon you the great importance of continuing your efforts in this most interesting and hopeful department of labor. acquisitions already made give promise of still richer rewards to him who will work with Nature, in compelling her to yield to his solicitations for still greater improvement. Much has already been done, but this branch of science is still in its infancy, and opens to the pomologist a broad field for enterprise. It may require time and patience and care to produce a superior variety, but we have the most cheering assurance of the time when every section of our country shall possess fruits adapted to its own locality. There is no better illustration of what can be accomplished than what has been done in the production of the various and excellent American fruits which have been raised since the establishment of our Society. If each member should originate one good variety, adapted to a wide extent of territory, or even to his own section, he would become a public benefactor. Think of the number of persons in the United States who are now engaged in the growth of fruits. Should each one produce one good variety—a not impossible thing—we should have varieties enough to endure for centuries, adapted to every soil and location in our vast territory.

Let any one visit the nurseries established by Mr. Clapp in Massachusetts, the originator of the Clapp's Favorite pear, and see the many seedling trees now just coming into bearing, and he cannot but be delighted, as we have been, with witnessing these trees in their youthful vigor, and studying the various forms into which the Bartlett, the Flemish Beauty, the Beurre d'Anjou, the Urbaniste, the Beurre Clairgeau, the Beurre Bose and other standard varieties have been changed, and he cannot but admit that the daily opportunity for such study would be an ample recompense for all the trouble and expense of raising such trees. But besides this gratification, is the probability of raising a new variety which, in one point or another, shall be superior to any before acquired, and which

shall be a blessing to the nation. Does any one object, that fruits adapted to cultivation through the country are few and far between! Let him raise a variety which shall be better adapted to his own locality than any before known. Let us have Favorites for Virginia and Georgia, and for all and every State of our nation. If I could feel that I had been the means of inducing our members, or other cultivators, to raise new fruits worthy to bear their names, I should feel that I had lived for a useful purpose.

The importance of producing new varieties from seed is no longer questioned. The fact that the seed of good varieties will generally produce good offspring, is now well established. These are, however, the natural results which have been derived from fruits already improved; and we can offer no better proof of the advantages of artificial impregnation than the multitude of improved varieties which have been produced in the vegetable kingdom by this process.

We have learned many of the laws which govern hybridization, and the more we become acquainted with this most interesting art, the more we work with nature in these efforts for her improvement, the more we shall admire this most perfect and beautiful illustration of the great fundamental law, which has been established from the beginning of time, for the improvement of men, animals and plants. Well did Linnaus exclaim, when overwhelmed with the discovery of an unknown principle in this most interesting study, "I have seen God passing by;" and well may the contemplation of this law inspire us with the same reverence and delight, and

" like conductors, raise
Our spirits upward on their flight sublime
Up to the dread invisible, to pour
Our grateful homage out in silent praise."

Let us go on, then, developing the wonderful resources of this art. Go on, persevere, and you will leave a rich inheritance to your heirs. Go on, and the time will come when every man shall sit under his vine and fruit tree, when all our hillsides shall rejoice in the burden of the vintage, our valleys teem with the golden fruits of the orchard, and the passing breeze become vocal with songs of gratitude and praise for these benefactions to posterity.

The increasing interest in the cultivation of fruit at the South, induces me to offer a few suggestions in regard to the best means of obtaining varieties suited to that region. Of apples and peaches, a large number of superior varieties have already been produced at the South, perfectly adapted to that climate; but the supply of fine varieties of the pear is yet inadequate, especially of late-keeping varieties, as the latest kinds grown at the North cannot, when grown in the Gulf States, be preserved beyond autumn. To supply this deficiency, we would recommend the trial of such varieties as refuse to ripen at the North—Chaumontelle, the Colmar and its sub-varieties, Beurre Rance Bergamot Fortunee—which appear to need a longer season than ours to arrive at maturity. These, and seedlings from these, offer, we think, the best prospect for a supply of late pears in the warmer parts of our country. We would also recommend a trial of the sorts used at the North for cooking, as some of these have proved fine dessert pears in the South. And probably some of the fine old varieties which have decayed at the East, and show signs of the same fate at the West,

may, in more genial climates, have their existence so far prolonged as to be among the most desirable.

## THE SOCIETY'S CATALOGUE.

Allow me again to commend to your consideration the value and importance of our Catalogue of Fruits. The completion of this work, by embodying the fruits of the Southern and Pacific States, is yet to be accomplished. This has been delayed from unavoidable circumstances, but we hope is now to be done, so that the basis of American Pomology can be established for the generations that are to succeed us. The work is indeed great, but it is a duty that devolves on us, as the representatives of that science which the Society has in charge. In proceeding with it, however, we find ourselves met by a difficulty not anticipated at the beginning of our work, arising from the unparalleled expansion of our country. In the few years since our catalogue was commenced, several new States and Territories have been organized, and if such expansion continues, as it undoubtedly will, it will be difficult to bring the catalogue, on its present plan, into any reasonable limits. On this point I hope to hear from the Chairman of the General Fruit Committee, to whom, more than to any one else, we are indebted for the progress already made; and I commend the subject to the thoughtful consideration of all the members of the Society, and especially invite the co-operation of every State, in collecting and transmitting to him the information necessary to the completion of our work.

### THE INCREASING IMPORTANCE OF FRUIT CULTURE.

The importance and value of our calling in developing the resources of our country, in the occupation of unimproved land, adorning our homesteads, enhancing the value of real estate, multiplying the blessings and comforts of life, and promoting a great source of national wealth, cannot be too highly appreciated. The more I reflect upon the progress we have made, the more am I confirmed in the belief that this branch of culture will, ere long, become second only to the growth of the bread and meat of our country. The enormous production of strawberries and other small fruits, the millions upon millions of baskets of peaches—not to speak of the apples and pears and other fruits that are now annually produced—give promise that the time is fast approaching when all classes of society may enjoy this health-preserving condiment as a portion of their daily food. Nor can I refrain from referring once more to the benign influence which our employment has upon the moral and religious instincts of the heart, the refinement of taste and the welfare of society. Whatever pleasure may be derived from other pursuits, there is surely none that has afforded stronger evidence of a high and progressive state of civilization or a more ennobling influence, than the culture of fruits. "This," says Gen. Dearborn, "must have been the first step in the march of civilization, while the method of ameliorating their character and multiplying the varieties, may be considered as taking precedence of all human efforts in the industrial arts.

From the day when God gave our father in Eden trees "pleasant to the sight and good for food," down to Solomon, who said, "I made me gardens and orchards, and I planted in them trees of all kinds of fruits," and through the successive generations of men, the cultivation of trees and plants has been the criterion of taste and refinement. No object of attachment is more naturally allied to the instincts of the soul, and truly did Emerson remark, "he who knows the most, he who knows what sweets and virtues are in the ground, and how to come at these enchantments, is the rich and royal man." And what greater benefactions can you leave for posterity, than these memorials which shall live and grow,

which shall tell of your love of the most beautiful works of nature, kindred and home, when you are shumbering in the grave! Far better these for the perpetuation of your memory, and the benefit of the advancing millions of coming time, than all the monumental shafts and pillars of polished marble that ever graced the hero's tomb.

### DECEASED MEMBERS.

Since my last report on the decease of members, three of the founders of this Society have been removed by death, "like fruits fully ripened in their season." I allude to Dr. Alfred S. Monson, of New Haven, Ct.; Dr. R. T. Underhill, of Croton Point, N. Y.; and Dr. Eben Wight, of Dedham, Mass.; all three of whom were present and took part in the proceedings of the first meeting, twenty-three years ago.

Dr. Alfred S. Monson died May 22, 1870, at New Haven, Ct., at the advanced age of seventy-four, universally respected and beloved. He was one of the signers of the circular calling the convention which resulted in the organization of our association; was the first Vice-President from Connecticut; and on that occasion read a most able and instructive paper "on the deterioration of certain fruits, and of parasitic agents injurious to vegetation." This paper may be found in the published Transactions of the Society, and gives evidence of the careful investigation and research of its author. Dr. Monson possessed a highly appreciative mind, a refined taste and a great capacity for enjoyment. Hence his love for fruits and flowers, which was a ruling passion with him through life. He was the first President of the New Haven Horticultural Society, established in 1831—one of the earliest in this country—and was a frequent writer on subjects connected with horticulture and rural arts. His address before that Society in 1843 is full of wisdom and beautiful illustrations. His memory will ever be revered and honored by all who knew him.

Dr. R. T. Underhill was also one of the founders of our Society, and his name is borne on the call for its first meeting. He commenced his pomological pursuits at Croton Point about forty-five years ago, the grape, of which he planted a large vineyard, being a specialty. His experiments commenced with foreign varieties, but these proving a failure, he turned his attention to the cultivation of the Isabella and Catawba, then but little known; and so great was his success that for many years he and his brother, with whom he was associated, sent more of these varieties to the New York market than were received from all other sources. He also commenced the manufacture of wine, and at the time of his death had about fifty acres of vineyard, and was also very successful in the cultivation of the plum, of which he gave an account at our last meeting. He was a leading member of the American Institute, and was one of the founders of the Agricultural and Horticultural Society of Westchester county, of which he was the first President. Dr. Underhill was a gentleman of the old school, courteous in deportment and refined in his tastes, and although his age prevented his frequent attendance at our meetings, his interest in our pursuits never declined. As a proof of his fidelity, he came to our last meeting in Philadelphia, and took part in our discussions as he had done in the beginning.

Dr. Eben Wight, of Dedham, Massachusetts, another of the signers of the call for the first meeting of this Society, died at his home, where he had carried on his pomological researches during his life. He had long been interested in horticultural pursuits, being an early member of the Massachusetts Horticultural Society, and for a long course of years Corresponding Secretary and Vice-President. For many years he was Chairman of the Fruit Committee of this Society for Massachusetts, in which capacity he made many interesting reports, which may be found among our published Transactions. He paid special attention to the apple, of which he had a large and choice collection of varieties:

and through his critical observation, he became remarkably well versed in the knowledge of this fruit, and introduced several fine varieties to notice. He was a modest and unassuming man, of the strictest integrity, and died, as he had lived, universally respected and beloved.

Nor can I close this sad record without adding the name of M. S. Frierson, Columbia, Tenn., who died March 28, 1870. Mr. Frierson was the Vice-President of the Society from Tennessee. He attended our last meeting, and his noble bearing and gentlemanly deportment will long be remembered by all who were present with him. He was by profession a lawyer, and at the time of his death was in practice as an old counselor at Columbia. But what most concerns us is his interest in pomological pursuits, which was strikingly evinced by the part which he took in the discussions of the Society; his remarks being always valuable, interesting and to the point. He was much interested in fruit culture, and had given particular attention to the hybridization of the nectarine and the pear, with the special view of producing late-keeping varieties of the latter. His experiments were evidently based upon truly scientific knowledge, and at the time of his death had already been the means of producing some valuable new fruits. In a letter written but a few months before his death he says, in speaking of his experiments, "they may turn out nothing; still the taste it gives my girls" (who had aided him in conducting them) "for such amusement, is worth more than the trouble. The seeds will be carefully planted, and we will wait and see." Noble sentiment! but the fruition of his hopes was transferred to another world, leaving us to wait and see the further results which they may produce here.

These associates have gone to their reward. Their seats in this Society are forever vacant, but their efforts for the advancement of our cause in the early history of our Society will be appreciated more and more as time moves on.

#### CONCLUSION.

With the deepest sense of gratitude do I rejoice in the presence of a few of the founders of this Society, whose lives have been prolonged to this day. Ere long, all those who were present at its first meeting, and he who by your indulgence has occupied this chair so long, will vacate their seats. Others will fill the places which we now occupy, but our Society, and the cause it seeks to promote, will live on to bless the generations which shall succeed us.

Long may the members of this Society meet together as friends and mutual helpers, dispensing and receiving good; and may your efforts for promoting this most beautiful of all arts, this health-preserving and life-prolonging industry, be crowned with continued success. May the Society go on conferring blessings on our country, until every hearth-stone and fireside shall be gladdened with the golden fruits of summer and autumn, until thanksgiving and the perfume of the orchard shall ascend together like incense from the altar of every family in our broad land, and the whole world realize, as in the beginning, the blissful fruition of dwelling in the "Garden of the Lord." And when at last the chain of friendship which has bound so many of us together in labor and in love shall be broken; when the last link shall be sundered, and the fruits of this world shall delight us no more; when the culture, training and sorrows of earth shall culminate in the purity, perfection and bliss of heaven, may we all sit down together at that feast of immortal fruits,

"Where life fills the wine-cup and love makes it clear, Where Gilead's balm in its freshness shall flow, O'er the wounds which the pruning-knife gave us below."

Adjourned to ten o'clock Thursday morning.

# SECOND DAY.

## MORNING SESSION.

Thursday, September 7th, 1871.

The Society met at ten o'clock in the morning, President Wilder in the chair. The reading of the minutes was dispensed with.

The President then read the following message, received by telegraph, from

P. Barry - Greeting -- I hope your meeting is a grand success. I am with you in spirit.

The message was received with rounds of applause, and the President directed to reply, which he did, as follows:

### To P. Barry, Rochester, N. Y.:

Grand success. Unanimous thanks of Convention. Hopes for your speedy restoration of health.

MARSHALL P. WILDER.

The report of the Committee on Nominations for Officers was then received, read, and the election made manimous; for which see previous pages.

The Treasurer's Report was then read, as follows:

Cambridge, Mass., September, 1871.

To the President and Members of the American Pomological Society:

GENTLEMEN—I submit a statement of the account of Receipts and Disbursements of the funds, as Treasurer of your association for the term 1869-1871, viz.:

## STATEMENT.

#### RECEIPTS.

1869.						
Sept.	To	Balar	nce on 1	and per Report 1869	\$158-28	
Dec.	• •	Cash	receive	d of M. P. Wilder, President	150 00	ı
Sept.	• 6	••	••	" thirty-two Life Members, \$10	-350 - 00	ı
"	••	**	• 6	" one hundred and eighty-seven Term Members, \$2	374 00	
**	••		••	for sale of one copy of Catalogue	75	
						\$1,003 03

#### DISBURSEMENTS.

1000

1869.					
Sept.	Ву	Casl	paid for printing free Return Certificate	\$ 2 00	
	**		" " Badge on silk for Members	7 60	
44	**	**	refunded two Term Contributions for two of Life	4 00	
"	••	••	paid F. R. Elliott, balance due on Salary	30 00	
**	**	• 6	" Salary for present term	100 00	
••	**	••	refunded " for Circulars, Postages, etc	13 90	
**	••	**	" a wood-cut	21 00	
Dec.	••	**	paid Samuel Chism, for Printing, Binding, etc., Catalogue and		
			Transactions of Twelfth Session	600 00	
• 6	**	••	<ul> <li>Samuel Chism, for Enveloping Paper, Postages and Labor,</li> </ul>	25 - 00	
Sept.	**	**	" Postages on Letters, \$13.99; and Transactions, \$4.63	18 62	
46	• •	••	" Express from Boston of Box	50	
••	**	**	" for Paper in corresponding, \$1.00; Envelopes, \$1.25	2 25	
**	••		" Printing, etc., of one thousand Blank Bills	4 00	
**	**	••	" F. R. Elliott, on Salary present term	50 00	
•6	44	••	Balance on hand	124 16	
					\$1,003 03

Respectfully submitted,

Tho. P. James, Treasurer.

The Chair then, in accordance with the Constitution of the Society, announced the names of persons to constitute the Permanent Standing Fruit Committees for the coming two years.

(This list will be found appended to that of other officers, on page 10.)

### PLACE OF MEETING IN 1873.

The fixing of the place for holding the next meeting of the Society, being next in order, the President said, that as it would be the quarter-centennial, and as many members in the Eastern States, and especially in Boston, had to do with its first organization, and as Boston was his home, he, with deference to the wishes, whatever they might be, of other gentlemen, should feel highly honored and gratified if it could be appointed to be held in Boston.

Hon. Joel Parker and Mr. Buswell, of the Massachusetts Horticultural Society, extended cordial invitations for Boston, and the Secretary of the American Pomological Society presented the following, received by him through the Secretary of the Massachusetts Society:

Massachusetts Horticultural Society, (Boston, August 7th, 1871.

At a regular meeting of the Massachusetts Horticultural Society, this day holden, it was

*Noted*, That the Massachusetts Horticultural Society invite the American Pomological Society to hold its next biennial session, in 1873, being the twenty-lifth year of its existence,

in the city of Boston, and that this Society extend to them hospitalities and provide accommodations for their exhibition.

A true copy from the records, (Attest)

EDWARD S. RAND, Jr., Secretary.

Mr. P. T. Quinn, of New Jersey, nominated Boston, Mass., and said, that in doing so he was not unmindful of the claims of his own State as a fruit-growing country, but thought it proper that the quarter centennial meeting of the Society should be held at the home of its distinguished and venerable President.

Parker Earle, of Illinois, said that State wanted a meeting of the Society; but from the associations of time and origin connected with the next meeting, he would reserve that State for another year, and join in the move for Boston.

Jno. M Allan extended an invitation to again meet at Richmond, either the next, or such future time as the Society might feel it to the interest of Pomological progress so to do.

Dr. Howsley expressed a wish that Leavenworth, Kansas, be the next place, but while so doing acknowledged, and in fact favored, the move for Boston.

W. C. Flagg remarked, favoring Boston for the next; but he wished all to remember that the next thereafter must be in Chicago, Illinois.

Col. Dillon said, Indiana would rejoice at a meeting of the Society in her borders, and her arms were open and full of welcome; but, like others, he supposed Boston had really the best claim for the next assembling, and he would coincide without a murmur

Col. Hardee, of Florida, would like the Society and its members to go farther into the sunny South, although he was thankful to it and them for the reach they have now made. He spoke feelingly and spiritedly of the North and South shaking hands so fraternally in this bond of love and union, and while the sunny South was dear to him, and full of beauty and intelligence, yet he knew it had not all thereof; and if they would not come to Florida, why he would go to Massachusetts, and would try to have as many join him as he possibly could.

The vote being taken, it was unanimous for Boston in 1873

To which Hon. Marshall P. Wilder responded, thanking the Society for its courteous amenity, in conceding all personal interests and feelings toward that of a request, in the fulfillment whereof he was much interested and gratified.

## MOTION TO VISIT CALIFORNIA.

D. B. Weir, of Illinois, made remarks and a motion, that the Society, as a body, visit California during the season of 1872. He expressed a feeling, that if it was generally known that a train would start at a certain time, and be at the command of the party, that hundreds of fruit growers of the Union would join it.

The motion, or proposition, was, by motion of P. T. Quinn, referred to the Executive Committee.

### INVITATION TO SUPPER.

John M. Allan, Esq., of Richmond, on behalf of the Richmond Horticultural Society, invited the members of the American Pomological Society to meet and partake of a supper, on Friday evening, the 8th.

The invitation was accepted, and thanks tendered.

### REVISION OF CATALOGUE.

# W. C. Flagg, of Illinois, offered the following:

Resolved, That the Committee on the Revision of the Catalogue be requested, except in such cases as it is impracticable, to place upon the lists only the names, with the appropriate number of stars, of such fruits as are—

- 1st. Recommended by the action of State or other local Horticultural organizations; or
- 2d. By the concurrent testimony of not less than three competent persons, who have had personal experience or observation in the district for which the respective fruits are recommended.
- Col. Carrington and others made remarks, when the matter was referred back to Mr. Flagg, who, as one of that Committee, should be empowered to act as, according to his judgment, would meet the best interests of the Society.

## DISEASED APPLE TREES.

J. S. Downer, of Fairview, Ky., stated that "many young apple trees were diseased and dying in sections of Kentucky; that the disease attacks the tree at its roots, and causes a speedy decay. There is an orchard of one hundred trees in my immediate vicinity, now ten years planted, and forty-five of them have died already, and some ten others are now in a dying condition. These trees were obtained from various nursery establishments, both North and South, and have had more than ordinary care bestowed on them since they were planted. If consistent, therefore, Mr. President, I offer the following, and ask the appointment of a committee thereon:

Whereas, a large percentage of the apple trees planted on rich limestone soils, south of the thirty-eighth degree of north latitude, die prematurely, or from the ages of two or three to some ten years, and from a cause or causes not well understood; therefore

Resolved. That a committee of three be appointed to examine into this disease and its cause, and make report at the next biennial session of the Society.

The motion or resolution was accepted, passed, and the President appointed as the Committee thereon, Messrs. W. C. Flagg, of Illinois; Thomas Meehan, of Pennsylvania and Robert Manning, of Massachusetts.

## COMMITTEE ON PRUNING.

D. B. Wier, of Illinois, asked the appointment of a committee to answer the following: Does an apple, pear, plum, peach or other fruit tree ever require any pruning whatever, one or two years from bud or graft, with the head started at point indicated by nature; or, in other words, does a tree that has never been trimmed or pruned up

any when planted in orchard, ever require any pruning whatever (to give the best results); and if so, at what time of its life!

The following gentlemen were named as the Committee: Wm. Saunders, of the District of Columbia; Dr. Stayman, of Kansas; D. B. Wier, W. C. Flagg, of Illinois; and Thomas Mechan, of Pennsylvania.

## COMMITTEE ON CODLING MOTH TRAP.

Invented by Thomas Wier, of Illinois. This Committee was appointed on motion of W. C. Flagg, of Illinois. It consisted of Charles Downing, of New York: Mark Miller, of Iowa; Parker Earle of Illinois; and the report will be found in Committee Reports.

## COMMITTEE ON MILDEWS, ETC.

Prof. Taylor, of the Agricultural Department, Washington, D. C., made some remarks, (which the Secretary regrets he has lost.) relative to the mildew and rot, of leaf and fruit; and after the following resolution by W. C. Flagg, a Committee, consisting of Thomas Meehan, William Saunders and Parker Earle, was appointed to act upon and report at next session of Society.

Resolved, That we have learned with great pleasure that Professor Thomas Taylor, of the Agricultural Department, is engaged in the prosecution of scientific investigations into the grape mildews and their cause; and that we trust that the Commissioner of Agriculture will be able to use some portion of the funds placed at his disposal, in the investigation of this and other fruit diseases; especially of the blight in the pear tree, "yellows" in the peach tree, and rot in its fruit.

### COMMITTEE ON BLIGHT.

# J. S. Newman, of Georgia, offered the following:

Resolved, That the Chair appoint a Committee of three, to report in season for the next Transactions, if possible, the cause and preventive or remedy for blight in the pear free; and to continue their labors, and again report at the next biennial session.

The Chair appointed as Committee, P. J. Berckmans, Thos. Mechan, Robert Manning, Wm. Saunders and Josiah Hoopes.

In connection with the above, the following, forwarded by P. Barry, Esq., and written by J. F. Tallant, of Burlington, Iowa, comes in appropriately:

As you correctly state, tree blight and grape rot, and, in fact, all kindred diseases, are entirely beyond the knowledge of the most careful and observing fruit growers. Nothing whatever in the shape of facts has as yet been discovered, and every man has his own theory, which the more it is enlarged on, the less light we have.

Apple tree blight has thus far given Iowa fruit growers in this vicinity very little trouble. A few varieties are subject to it, and these had better not be planted at all. There is a sort of leaf and new growth scald, which destroys the young twigs and gives inexperienced planters some uneasiness, but which does no damage whatever. This prevails all over the country, and is not worth notice. As a general rule, the climate of Iowa is adapted in an unusual degree to the successful growth of the apple.

Pear blight is a very different thing. It attacks trees of all ages and sizes, and its appearance is so erratic and sudden as to be inexplicable by any known rules of plant growth or destruction. I did say, in the Horticultural meeting, that I cared nothing about hunting for its origin or cause, so long as we could get ahead of it; and I further stated that the experience of the past seven years had induced me to hope that at last its ravages had been averted. So long as a complaint may certainly be cared, we need not worry about hunting up the cause.

I have been engaged in growing pears in Iowa since 1847, with some intermissions, and I have lost fifty times as many trees by blight as I have now growing. In 1864, I was induced to cease cultivating them altogether, to allow the grass to grow close up to the trees, only keeping it cut every few weeks, and to obviate the binding and repressive effects of this treatment, by putting a wheelbarrow load of manure around each tree every antumn. Since that date, eight years ago, I have never lost a tree, and even saved some old wrecks which I had given up as past cure, which are now the most interesting specimens on the place. I have dwarf pear trees that are twenty four years old, and in perfect health and vigor. One of these has borne seven bushels of fruit this summer, and all that I would spare from it has sold at two dollars and a half per bushel, the buyer coming after them. All my trees are most vigorous and loaded with fruit. The success of the present year has been that of the preceding seven. I do not give this treatment at all as a cure for blight, for it may return again; but I do wish to make it public, that others may try the same method, with, it is hoped, the same success. Even those who do try and consider it a failure, ought not to give it up, but try again. It is so simple and easy of adoption as to be within the reach of all.

## TAX ON DISTILLATION OF FRUITS.

J. S. Newman, of Georgia, offered a resolution on Congressional matters of control, relating to taxation on the distillation of peach brandies, etc., which, after much discussion, was ruled out of order, and lost by almost an unanimous vote—as a feature with which the American Pomological Society, in its legitimate role, has nothing whatever to do.

## CONGRESSIONAL APPROPRIATION.

Mr. Elliott, of Ohio, moved that a Committee be appointed to petition Congress for \$20,000, as a permanent fund, of which the Society shall use nothing but the interest for twenty years.

Agreed to, and the President and Secretary authorized to appoint the Committee.

Pending this motion of Mr. Elliott, there was considerable discussion, resulting in a general opinion that "republics are ungrateful," and far from disposition to foster the interests and home comforts of the people. Mr. Elliott, although acknowledging the fact, yet had reason to believe there was, in the minds and breasts of the members of the Congress of the United States, as much of disposition to assist and appropriate, where no apparent use should be made for other than public good, as in the members of the Society itself; and, as Secretary, he would now urge upon every member of this association, conversation with and representation to, every member of Congress from his section, respecting the wants of this association and its labors for the public.

## NAME OF APPLE.

Dr. Howsley, of Kansas, spoke relative to name of Janet or Genet Apple, and the subject matter was referred to him, as a Committee of one, to report. See said report on future page.

### DISCUSSION ON APPLES.

The President and Secretary both remarked, that at this meeting it was all. important we should gain as much information respecting the values of varieties of fruits throughout the Southern States as could be, from the knowledge of the many capable fruit growers of the South present, and suggested that discussions be mainly given up to varieties suited to the South and remarks of gentlemen therefrom.

W. C. Flagg, of Illinois, who had previously introduced a resolution relative to revision of Catalogue, asked "What shall govern and place a fruit on this Society's Catalogue!"

Several members responded, with the general acceptance that, as heretofore, the judgment of fruit growers, acquainted with the State or locality they represent, is at present our only reliable resource, and perhaps as reliable as it is possible to obtain; for we suppose the man who, after an acquaintance of years, and imbued with the love of the subject, free from personal gain, as all must be who attend the American Pomological Society's meetings, as capable of judging and valuing varieties, as under any existing rules and laws may be possible.

The President then called on Mr. P. J. Berckmans, of Georgia, to open the discussion, by proposing varieties suited to the South.

Mr. Berckmans accordingly named Red Astrachan, to which he would give \*\* for Georgia; and the response came alike from Virginia, Alabama, District of Columbia, Maryland, and all South.

Mr. Flagg, of Illinois, stated the variety as unproductive since 1848, but he should be unwilling to discard it.

Earle (same State) would not.

Dr. Howsley, of Kansas, knew it to be a fine apple in Kentucky, and a success; but in Kansas it is late coming into bearing; yet by top grafting on stocks adapted to the soil, the objection is removed.

Wier, of Lacon, Ill., says with him it bears young; healthy tree; but not productive nor profitable.

MILLER, of Iowa.—Totally worthless in Central lowa; discarded all over the State; never saw a ripe one.

Jewell, of Minnesota.—Tree hardy, and more productive on timber than prairie lands.

Wier, of Illinois.—Trees on prairie soil have not borne; tree hardy and grows well; hope that it will succeed as it grows older.

Paul, of Massachusetts.—Grows well in Massachusetts and Eastern New York; hardy when young, and a good bearer on all soils and in all localities.

LINDERMAN, of Michigan.—On the sandy soils of Western Michigan it produces well and is a fair fruit; on the clay loams of the central and Eastern portions of the State, it is not so productive, and scabs and cracks.

Masters, of Nebraska.—Healthy and hardy tree, but not productive on the rich prairie soils; but on the thinnest lands and on the bluffs, in a few orchards have seen it producing well; should be cultivated only on thin and sandy soils; on prairie soils, its foliage turns yellow and then white; would not recommend it for general cultivation in Nebraska.

American Summer Pearmain was marked with \* each for Georgia, Alabama, Kentucky, Nebraska, South Carolina, Iowa and Minnesota, and \*\* for Virginia, District of Columbia, Kansas and Maryland.

Early Harvest.—Berckmans would give this apple \* for general cultivation in Georgia (not a valuable market fruit), and \*\* for cultivation for family use.

It received \*\*\* for Alabama, District of Columbia, Kentucky and Tennessee, and \* for South Carolina, Kansas, Nebraska, Illinois and Virginia.

Col. Hardee, of Florida, said "give it sixteen stars for our State."

Red Margaret or Striped June of the South, but declared to be Red June, received \* for Georgia, and \*\* for South Carolina and Iowa.

Masters, of Nebraska.—Worthless in Nebraska.

Summer Queen received \*\* for Georgia, District of Columbia, Maryland, Northern Virginia and Alabama, and \* for Southeastern Virginia.

Horse Apple received \*\* for Georgia, and, if synonymous with "Haas," the same for Minnesota, and, if "Hoss," the same for Southern Illinois. There was a confusion of names here.

Carolina Red June received \*\* for Georgia, District of Columbia, Virginia, Maryland, Kansas, Kentucky, South Carolina, Nebraska, and \* for Iowa.

FLAGG, of Illinois.—It should be highly cultivated with us.

Wier, of Illinois.—If thoroughly cultivated, with trees low-headed and not allowed to overbear, it is valuable.

Summer Sweet Bough received \*\* for Virginia, District of Columbia, Maryland, Kentucky and Connecticut, and \* for Georgia, Kentucky, Alabama, Michigan and Massachusetts.

Autumn Sweet Bough received \*\* for Georgia and Kentucky. -

Buncombe received \*\* for Georgia, Kentucky, Alabama and South Carolina, \* for Iowa, \* and a half for Kansas.

Carter's Blue.—\*\* for Georgia.

Carolina Greening.—\*\* for Georgia, Kentucky, South Carolina, and Alabama, and \* for District of Columbia and Maryland.

White Winter Pearmain received \*\* for Georgia, Kentucky, Alabama, South Carolina and from Dr. Howsley Kansas, while Dr. Stozman demanded and would give it but one for Kansas. Iowa gave it \*.

Buckingham received \*\* for Middle Georgia, South Carolina and Virginia, and \* for Maryland and District of Columbia.

FLAGO, of Illinois, said the Salem, which he had fruited two or three years, is identical with this apple.

Taunton received \*\* for Middle Georgia, Kentucky and Alabama.

Ben Davis received \*\* for Georgia, Kentucky, Nebraska and Kansas, and, for market purposes alone, \*\*\* for Illinois and Iowa. It also received \* for Alabama, District of Columbia, Maryland and Virginia.

Cannon Pearmain received \*\* for Virginia, District of Columbia, Maryland and Kentucky, and a \* for Kansas.

Dr. Howsley, of Kansas, stated that it was introduced into Kentucky from Virginia, in 1795, by Edward Darnaby.

SAUL, of the District of Columbia, said it originated in Loudon County, Va.

Williams, of Virginia, claimed it originated in Bradford County, which adjoins Loudon.

Holly received \* for Kansas, Kentucky and Georgia.

Junaluskee received \*\*\* for Alabama, and \* for Georgia and Kentucky.

Mangum (or Carter) received \*\* for Kentucky, Alabama and Kansas; Howsley, of Kansas, remarking that it is one of the best apples grown in Kansas. It received \* for Virginia and Georgia.

Nickajack received \*\* for Virginia, District of Columbia, Maryland, and Alabama; and \* for Middle Georgia, Kentucky and Illinois: one Illinois member remarking that he thought it merited about \* and a half.

Pryor's Red received \*\* for Georgia, District of Columbia, Maryland, North Virginia, Kansas and Southern Illinois, and \* for South Carolina and Iowa.

Allan, of Virginia.—It is useless as a market apple in East Virginia; is unproductive, and the tree is not healthy; it should only be recommended on account of its quality; grown on strong soils in high localities, it is a useful apple for domestic use, but not profitable.

Howsley, of Kansas,-Top-graft it, and it is excellent in Kentucky.

FLAGG, of Illinois.—In some parts of Kentucky it has proved unhealthy; in South Illinois it is healthy and productive

Howsley, of Kansas.—It must be grafted above ground, and it will prove profitable.

Williams, of Virginia.—In Northern Virginia it is entitled to \*.

Chamberlain, of Virginia.—In the extreme northern part of Virginia it is a valuable apple, hence I gave it \*\*.

Langdon, of Alabama.—It does not succeed in South Alabama.

Miller, of Iowa.—It is one of the best apples we grow; bears late, but well when once in bearing.

Gilpin received \* for Virginia and South Carolina, Middle Georgia, District of Columbia, Kentucky, Nebraska, Illinois and Minnesota, and \*\* for Kansas.

King, of District of Columbia.—In Maryland, it is excellent on rich soil.

Shockley.—\*\* for Georgia, Iowa, Maryland, Alabama and South Carolina; \* for Illinois.

Berckmans, of Georgia, says it is the best winter apple for Middle Georgia.

Flagg, of Illinois, says it is promising in Southern Illinois; tree strong and vigorous.

Elliott, of Ohio.—Popular throughout the South.

Stevenson's Winter received \*\* for Georgia and Alabama.

Yates received \*\* for Middle Georgia, Berckmans saying that it resembled Hall, but is superior to it.

Large Striped Winter Pearmain received \*\* for Georgia, Kentucky and Kansas.

White Winter Pearmain received \*\* for South Carolina, Georgia, Kansas, Iowa, and for Nebraska, if top-worked, otherwise \*; it also received \* for Virginia and Illinois.

Mason's Stranger, Allan, of Virginia, said, is, for Eastern and Southern Virginia, one of the best winter apples we have.

Pilot, Allan, of Virginia, says, originated in Nelson County, Va., and is one of the best apples for the Piedmont section of Virginia.

Winesap received \*\* for Virginia, District of Columbia, Maryland, Kansas, Kentucky, Iowa and Nebraska, and \* for New Jersey, South Illinois and Michigan.

Rawle's Janet received \*\* for Virginia, District of Columbia, Maryland, Kansas, Kentucky, Nebraska, Iowa and Southern Illinois, and \* for Northern Illinois.

Maiden's Blush received \*\* for Virginia, Kansas, New Jersey, Illinois, Iowa, District of Columbia and Pennsylvania, and \* for Massachusetts, Nebraska, Maryland and Kentucky, Florida refusing to give it any.

Fallawater received \*\* for Michigan, Virginia, Pennsylvania, Iowa, Kansas and New Jersey.

Yellow Newtown Pippin (Albemarle Pippin of Virginia, and other Southern States,) received \*\* for the Piedmont region of Virginia and for Kansas.

York Imperial received \*\*\* for Virginia and Pennsylvania, and \* for District of Columbia and Maryland.

Winter Sweet Paradise received \*\* for Virginia and Kansas.

Loudon's Pippin received \*\* for Virginia, District of Columbia and Maryland.

Chamberlain, of Virginia, says the original tree was produced on the farm of Levi White, London County, Va., and is still a vigorous bearer; has recently produced in one season eighty bushels of marketable apples. It is a thrifty growing tree, spreads very much; fruit large, delicious in flavor, and promises to be one of the leading varieties of winter apples in the South.

Adjourned to three o'clock in the afternoon.

## AFTERNOON SESSION.

Society re-assembled at three o'clock in the afternoon, President Wilder in the chair.

## REPORTS OF COMMITTEES.

Being in order, were received, as follows:

### REPORT OF COMMITTEE ON FRUITS EXHIBITED.

The Committee appointed to make a record of the number of plates of fruit exhibited, respectfully submit the following report:

From Nebraska State Horticultural Society, Nemaha County, R. W. Furnas, Secretary: One hundred and thirty-four varieties of apples, twelve varieties of seedling peaches, ten varieties of pears, two varieties of plums, one variety of grapes. The collection of seedling peaches and apples attracted marked attention. Fourteen years ago not a single fruit tree of any variety was grown in Nebraska.

Dr. Wylie, of South Carolina, exhibits forty varieties of seedling grapes, which are fully described in his elaborate report on hybridization, sent to the Secretary of this Society.

Eliwanger & Barry, of Rochester, N. Y., exhibit a collection of one hundred and fifty-seven varieties of pears.

Franklin Davis, of Richmond, Va.: One hundred and ninety-three varieties of apples, thirty-one varieties of pears, two varieties of peaches.

H. R. Robey, Fredericksburg, Va.: Six varieties of grapes, twenty-three varieties of apples, twenty-two varieties of pears.

Southern Illinois, grown at Cobden and its vicinity: Two hundred varieties of apples, fifteen varieties of pears; exhibited by Parker Earle.

John Hopkins, Wilmington, N. C.: Scuppernong grape and the Muscadine Superior (a seedling.)

Kansas State Agricultural Society: Two hundred and tifty varieties of apples and thirty varieties of pears.

Marshall P. Wilder, of Boston, Mass.: Two hundred and thirty-two varieties of pears. The largest collection contributed.

Wm. O. Hurt, Bedford County, Va.: Fifty-one varieties of apples.

Henry B. Jones, Brownsburg, Rockbridge County, Va.: One hundred and ten varieties of apples, ten varieties of pears, ten varieties of peaches.

California State Agricultural Society: Forty-one varieties of pears, thirty-six varieties of apples, thirteen varieties of grapes, one orange, one dish of olives, one dish of quinces, and one of plums.

Mark Miller, a delegate from Iowa, exhibits one hundred and eighteen varieties of apples from Des Moines County, a section of the State where, but twenty-three years ago, there was not an apple tree of any kind.

- H. Leonard, also from Iowa, exhibits one hundred and thirty varieties of apples and twenty-three varieties of pears.
- G. F. C. Leighton, of Norfolk, Va., exhibits eight varieties of pears, including magnificent varieties of the Duchess, some of which weighed thirty and a half ounces; also Seckles of very large size.
- P. A. Jewell, of Minnesota: Sixty varieties of apples, including fine specimens of erab apples.
- F. & L. Clapp, of Boston: Twenty-nine seedling pears, among which were some of the well known Ciapp's Favorite.

Michigan State Pomological Society, by M. Linderman, Agent, exhibits one hundred and one varieties of apples, six varieties of grapes, nine varieties of peaches, eleven varieties of pears.

C. C. Langdon, of Mobile, exhibits Scuppernong grapes.

Stephen W. Underhill, Croton Point, N. Y., exhibits Croton and Senasqua grapes.

George W. Campbell, Delaware, Ohio: Martha grape.

Tyree Dollins, Albemarle County, Va.: One hundred and thirty-five varieties of apples.

Mansfield Call, Richmond, Va.: Four varieties of pears.

Wm. Parry, Cinnamonson, N. J.: Twenty-six varieties of pears and thirty-three varieties of apples.

- D. W. Herstine: New seedling raspberry, two varieties—Herstine & Saunders.
- W. D. Breckenridge, Baltimore, Md.: Thirty-six varieties of pears.
- J. H. Ricketts, Newburgh, N. Y.: Seedling grape "Secretary."

Smith, Clark & Powell, Syracuse, N. Y.: Fifty-six varieties of pears.

- Geo. W. Purvis, Nelson County, Va.: Five varieties of seedling peaches, one variety of apples, one plate Catawba grapes.
- G. Gillingham & Co., Fairfax County, Va.: Eighteen varieties of apples and twenty-one varieties of pears.
- J. W. Porter, Charlottesville, Va.: Four varieties of grapes and eleven varieties of apples.
- Will & Clark, Fayetteville, N. Y.: Twenty-two varieties of pears and five varieties of apples.

Potomac Fruit Growers' Association: Eighteen varieties of apples, fifty-four varieties of pears, three varieties of grapes, and one variety of figs.

J. C. Parker, of Richmond, Va.: One variety of apples.

Agricultural Department, Washington, D. C., by  $\hat{W}$ . Saunders: Thirty-six varieties of pears and six varieties of grapes.

Mrs. S. E. Byers, of Texas: One case of dried figs.

Virginia Nursery and Wine Company, Allan, Johnston & Co., Agents: Eleven varieties of native wines.

George Leick, of Cleveland, Ohio: Four varieties of native wines.

- F. W. Lemosy, of Norfolk, Va.: One variety of native wine.
- G. Hoope, of Wilmington, N. C.: One variety of wine.

Whole number dishes of apples, sixteen hundred and twenty nine; whole number dishes of pears, eight hundred and seventy-four; whole number dishes of grapes, eighty-one; whole number dishes of peaches, etc., twenty-seven; total, Twenty-six hundred and eleven.

Although not in the class of fruits, we cannot fail to mention the *Paulonia Imperialis*, seventeen feet high, one year from the seed, contributed by Messrs. Leckenby & Laird, of Richmond. This is considered one of the finest ornamental trees in the South.

John E. M. Gilley, of Massachusetts.

Chairman of Committee.

### REPORT OF COMMITTEE ON BEST COLLECTION OF FRUITS.

The Committee on Special Premiums for the best collection of apples, peaches, pears and grapes, report that the only entry meeting the requirements of this premium is that from Nebraska, and respectfully recommend that the premium of one hundred dollars offered by the Virginia Pomological Society, be awarded accordingly.

W. Saunders, W. Brown Smith,

P. J. Berckmans,

Committee.

Col. Furnas, of the Nebraska delegation, rose immediately after the reading of the report, and said Nebraska did not send her fruits here to take premiums, and begged leave to donate the premium awarded to the American Pomological Society. The donation was accepted, and three cheers given for Nebraska.

### REPORT OF COMMITTEE ON GRAPE PREMIUMS.

We, the undersigned, appointed to award premiums on American grapes, as per special premiums contributed by Charles Downing, Gen. R. L. Page, Hon. John B. Whitehead, Messrs. Downward, Anderson & Co., and Messrs. Chas. T. Wortham & Co., respectfully submit the following report, to wit:

- 1st. No collection of twenty varieties of American grapes found.
- 2d. No half-bushel of Flowers grape found.
- 3d. Premium of twenty dollars awarded to John Hopkins, Wilmington, N. C., for half-bushel of Scuppernong grapes; who also exhibited a half-bushel of large black grapes, which he called Muscadine Superior, and which he claims is a seedling of his.
- 4th. Premium awarded to Michigan State Pomological Society, of ten dollars for best twelve bunches of Delaware grapes.
- 5th. Premium of ten dollars awarded to J. W. Porter, for best twelve bunches of Norton grapes.

WILLIAM PARRY, G. F. B. LEIGHTON,

Committee.

### REPORT OF COMMITTEE ON GRATUITIES.

To the President and Members of the American Pomological Society:

Your Committee on Gratuities would report as follows:

- 1st. The premium of five dollars, offered by W. S. Butt, of Norfolk, Va., is awarded to Dr. A. P. Wylie, of South Carolina, for his collection of hybrid grapes.
- 2d. The premium of five dollars, offered by Randolph & English, of Richmond, is awarded to Mr. R. W. Furnas, of Nebraska, for his collection of seedling peaches.
- 3d. The premium of twenty dollars, offered by the Southern Fertilizer Company, of Richmond, is equally divided, and awarded to the California collection of fruits, and to Dollin & Bro., of Albemarle County, Va., for their collection of apples.
- 4th. The premium of twenty dollars or a medal, offered by G. F. B. Leighton, of Norfolk. Va., is awarded to the Kansas collection of fruits.

All of which is respectfully submitted.

James H. Masters, H. B. Ellwanger, D. W. Herstine,

Committee.

#### REPORT OF COMMITTEE ON FIGS.

The Committee on Figs, etc., respectfully report, that they have awarded the premium on same to Mrs. Chas. II. Rowland, of Norfolk, Va., for a large plate each of the following varieties, viz.: White Ischa, Black Ischa and Brown Turkey. There were no oranges or pomegranates on exhibition, and only a few indifferent olives.

JNO. B. WHITEHEAD,

Chairman of Committee.

### REPORT OF COMMITTEE ON ADDITIONAL PREMIUMS.

Your Committee appointed to examine fruit entered to compete for the list of Additional Premiums, respectfully report, that inasmuch as these premiums were offered quite late, no articles were entered for competition. The Committee take the liberty of suggesting that the amounts offered as prizes be appropriated for the benefit of the Society, to be used as premiums again, or otherwise, as may be considered best; provided the parties offering such premiums, consent to such a disposition of them.

Respectfully submitted,

W. C. BARRY, R. L. PAGE, D. B. WIER,

Committee,

### REPORT OF COMMITTEE ON CONCUSSION.

To the President of the American Pomological Society:

Your Committee appointed to report upon the discovery of Col. Lucius A. Hardee, of Florida, as to the effect of concussion upon insect and vegetable life, etc., respectfully report that we have listened to Col. Hardee's statement of facts and theory, and have examined his attests of facts. We regret that we have had no personal opportunity to make practical tests. Col. Hardee claims for his discovery—

- 1st. That concussion will destroy insect life, and brings facts to prove that the cotton worm, curculio and other insects have been so destroyed, the past season.
  - 2d. That violent concussion imparts new impetus to vegetable growth and vitality.

3d. That the concussion by the explosion of large quantities of powder in the atmosphere, will prevent, check or destroy the action of malaria and epidemic diseases.

These, in brief, are the claims. Your Committee do not regard the tests thus far sufficient to establish these claims beyond doubt, but we cordially commend to this Society the whole subject, as worthy of careful experiment by its members, and recommend that a vote of thanks be tendered to Col. Hardee, for presenting his claims and making known his discovery *pro bono publico*.

Chas. D. Bragdon,
W. Schley,
P. T. Quinn,
D. B. Herstine,
Geo. Thurber.

Committee.

### REPORT OF COMMITTEE ON SPECIAL PREMIUMS

Offered by the following parties, viz:

Ellwanger & Barry, of Rochester, N. Y., tifty dollars for the largest and best collection of apples, not less than fifty varieties, three specimens of each.

To Mark Miller, for the collection of apples from lowa.

Marshall P. Wilder, of Boston, Mass., fifty dollars for the largest and best collection of pears, not less than fifty varieties, three specimens each.

To Ellwanger & Barry, Rochester, New York.

Thomas P. James, of Philadelphia, Pa., thirty dollars for the largest and best collection of peaches, not less than ten varieties, of six specimens each.

There was no competition for this premium.

Chas. Downing,
P. T. Quinn,
J. S. Downer,

Committee.

## REPORT OF COMMITTEE ON CODLING MOTH TRAP.

Your committee appointed to report on Thomas Wier's Codling Moth or Apple Worm Trap, would respectfully report that we have examined the same, and do find that, in our opinion, it is a simple and efficient means for trapping this most destructive insect.

Chas. Downing,
Mark Miller,
P. T. Quinn,

Committee.

### REPORT OF COMMITTEE ON ADDITIONAL PREMIUMS.

The Committee on the following premiums, viz.: by Smith, Clark & Powell, D. D. T. Moore, Southern Planter and Farmer, and Rural Carolinian, respectfully report that, inasmuch as these premiums were offered quite late, no articles were entered for competition. The committee take the liberty of suggesting that the amounts offered as prizes be appropriated for the benefit of the society, to be awarded as premiums again or otherwise, as may be considered best, provided that parties offering such premiums consent to such disposition of them.

R. L. PAGE, D. B. WIER, Committee.

#### REPORT OF COMMITTEE ON WINES.

The Committee on Wines had that subject, last evening, 7th instant, under consideraation, and beg leave to make the following report: At the outset it was determined that the qualities of the wines should be indicated by a numerical standard, and that the number "10" should be regarded as the maximum of excellence.

It is probable that the Committee, more accustomed to European wines, and taking them as their guide, may have been influenced involuntarily in their judgments, and decreed harshly. For, of all the wines exhibited, there were none exceeding two years of age, and most of them but one; and not three, in their estimation, came up to the maximum standard, and they were Leicks' Norton and Concord, and Hooper's Scuppernong.

In the determination of premiums, we observe in every case where offered, a dozen bottles of any particular kind of wine required for exhibition. As this seems to have been a general impression on the part of exhibiters, except in the case of Mr. Hooper, we therefore decree that he is entitled to the premium of twenty dollars, offered by C. D. Barbot, Esq., of Norfolk, Virginia.

W. H. HAXALL, W. GILHAM, GEO. S. PALMER, G. A. BARKSDALE,

Committee.

#### REPORT OF COMMITTEE ON CREDENTIALS.

To the President and Members of the American Pomotogical Society:

Your Committee appointed on Credentials, beg leave to report as follows:

### PENNSYLVANIA.

Pennsylvania Horicultural Society.—Robert Buist, G. Emerson, Thos. Meehan, Josiah Hoopes, Richard Wright, W. Hacker, J. S. Houghton, W. Parry, D. W. Herstine, S. W. Noble, S. C. Ford.

Pennsylvania Fruit Growers' Society.—J. E. Mitchell, H. M. Engle, Thos. Mechan, T. B. Jenkins, S. W. Noble, Geo. Achelis, E. Satterthwait, Thomas M. Harvey, William Hacker, S. B. Heiges, F. F. Merceron, Hiram Engle, Geo. B. Thomas, Abner Hoopes, Ed. J. Evans.

### NEW YORK.

Newburgh Bay Horticultural Society.—Charles Downing, Alfred Bridgeman, D. A. Scott, Daniel Smith, J. C. Chapman, Charles Dubois, Charles Cornell, C. Gilbert Fowler, T. S. Force, William Gingell, Francis Kelley, E. H. Clark, Alexander Young, W. D. Humphries, Jos. V. Whelan.

Western New York Horticultural Society.—W. C. Barry.

### MASSACHUSETTS.

Massachusetts Horticultural Society.—Hon. Marshall P. Wilder, George Craft, Hon. Joel Parker, Samuel Hartwell, Otis Cary, Hon. Thos. P. James, Jas. Crnickshank, Hon. Jas. W. Clark, E. W. Cobb, Arthur Bryant. Robert Manning, E. W. Buswell, Frederick Clapp, Lemuel Clapp, John E. M. Gilley, B. K. Bliss, John G. Barker, Benjamin G. Smith, J. C. Hovey, E. F. Washburne, J. W. Manning, H. H. Pilsbury, L. H. Felton, A. W. Felton, J.

H. Frothingham, A. Cushing, Jr., W. H. Spooner, W. R. Mann, George B. Durfee, Edwin Hoyt, J. P. Childs.

Essex Institute, Salem.—Robert Manning.

#### NEBRASKA.

Nebraska State Horticultural Society.—James H. Masters, Robert W. Furnas.

#### KANSAS.

Kansus State Horticultural Society.- Dr. W. M. Howsely, Dr. J. Stayman.

#### MICHIGAN.

State Pomological Society.—A. T. Linderman, S. H. Evarts.

State Agricultural Society.—A. T. Linderman.

#### SOUTH CAROLINA.

State Agricultural and Mechanical Society.- Dr. A. P. Wylie, E. C. McLurn, Wm. H. Branley, Joseph H. Foster.

#### TENNESSEE.

Giles County Fruit Growers' Society, B. F. Carter, S. E. Rose, H. C. Bate, A. Cox.

### NEW JERSEY.

State Agricultural Society. -- P. T. Quinn.

Bricksburg Agricultural and Horticultural Society. John S. Calkins.

Monmonth County Agricultural Society.—Benjamin B. Hance.

### CONNECTICUT.

State Agricultural Society.—W. H. Yeomans.

### VIRGINIA.

Horticultural and Pomological Society. J. R. Renni, Capt. C. H. Dimmock, J. M. Porter.

#### GEORGIA.

State Horticultural Society.—J. S. Newman, Hon. Wm. Schley, P. J. Berckmans.

State Agricultural Society.—P. J. Berckmans.

Cotton States Mechanics' and Agricultural Fair Association .-- P. J. Berckmans.

## ILLINOIS.

State Horticultural Society.—Arthur Bryant, W. C. Flagg, D. B. Weir, Parker Earle.

#### MINNESOTA.

State Horticultural Society.—P. A. Jewell.

#### CALIFORNIA.

State Board of Agriculture.—P. Barry, M. P. Wilder, C. T. Jennings.

IOWA.

State Agricuttural Cottege.—Mark Miller.

### DISTRICT OF COLUMBIA.

Potomac Fruit Growers' Association.—William Saunders, P. H. Folsom, J. H. Gray, H. Amidon, Thomas Taylor, Jno. B. Clagett, D. S. Curtiss, Ed. Daniels, G. E. Chamberlain Chalkley Gillingham, John Saul, D. Darby, D. O. Munson, Ira Hopkins, J. B. Bryan, J' E. Snodgrass, Z. M. P. King, W. H. Lipscomb.

Department of Agricutture.—John B. Russell, William Saunders.

WILLIAM SAUNDERS, W. BROWN SMITH, GEO. ELLWANGER,

Committee. -

In addition to the above, the Secretary of the American Pomological Society would make special notice and give commendation to M. P. Handy, of the *Richmond Dispatch*, and Col. Gilman, of the *Enquirer*, for their complete record made of the Society's proceedings, and from which he has availed himself largely in the making up of the present report.

He would also note the attendance upon the meeting of Hon. A. Mori, Japanese charge d'affaires.

### REPORT OF COMMITTEE ON NATIVE FRUITS.

The Committee on Native Fruits respectfully report, that since the last meeting of the Society a large number of new varieties, of American origin, have been brought to notice. A large number of these new varieties have not been fruited at other than the place of their origin. Some of them will doubtless prove synonymous with old sorts. Many will most likely prove to be of little value: whilst a few will be important additions to the catalogue of useful sorts. The Committee would take this occasion to congratulate the American Pomological Society, and the fruit growers of the country in general, that so much intelligent and persevering effort is now being given to the production of new and improved varieties, in all parts of our country.

With the limited knowledge of your Committee concerning the particular characteristics and qualities of a majority of these new varieties, they have thought it best to merely enumerate them in the following manner, so as to place them on record in the Society's Transactions and bring them to the attention of cultivators; at the same time cautioning the public in reference to planting *more* than *one* of a kind, until its value has been more widely tested and acknowledged.

### APPLES.

Ripley.—(Syn.) Ripley Claret, Ripley Claret Seedling. This apple is described by W. C. Flagg, Esq., in *Titton's Journal of Agriculture*, as introduced by J. S. Peers, of Collinsville, Madison County, Illinois, and a seedling grown by N. L. Ripley, of that place.

The fruit is medium to large; oblate; generally somewhat conical; somewhat lop-sided; calyx large and closed; stem medium in length and rather slender; skin smooth and shining; color a greenish ground, nearly covered with a brilliant crimson, and marked with

numerous white dots; flesh white, firm, moderately juicy, sub-acid, and in quality very good to best; core rather small; season, August and September. The tree is said to be thrifty, well shaped and tolerably productive.

Sylvan Sweet Crab Apple.—Under the above name, we have a small, round, red apple, sent us by A. L. Hatch, of Ithaca, Richland County, Wisconsin.—It is a pretty fruit, of a mild, sweet and tender flesh, and where such varieties as the Jersey Sweet, Sweet Bough, etc., cannot be grown, may be valuable.

Mr. Hatch writes, that "it originated in the grounds of C. P. Alling, from seed of Siberian; the original tree being now (1871) nine years old. The tree very symmetrical and productive."

Large for a crab; round; regular; light carmine red on warm yellow ground; many light yellow gray dots; stem slender; calyx with reflexed segments; flesh yellowish white, tender, rather dry, sweet, pleasant; good to very good; August and September. Originated by C. P. Alling, from seed of the Siberian.

O. A. Kenyon, of McGregor, Iowa, sends, September 22, 1871, a crab that, as received, is ripe. He writes, "it will keep until February."

Fruit large for a crab; conical; rich yellow, mostly overspread with carmine red, in stripes and shades; calyx in a corrugated projection; stem slender, short; flesh yellowish.

Fay's Joe Apple. This is a variety supposed to be a hybrid between Early Joe and Siberian Crab, specimens of which we have received from Charles Andrews, Esq., of Marengo, Ill.—It was raised by L. Woodward, of Marengo.

The fruit is about the size of Early Joe; oblate; yellow, grained with broken stripes of carmine red; flesh white, granular; like sharp sand moistened with acid water to the palate; good when you are educated to it, as is said of eating saur kraut.

Taft.—This came from S. F. Taft, Hannibal, Mo., who claims it a seedling, and says a notice of it was published in the Journal of Agriculture.

Fruit small or below medium: oblate; deep rich orange yellow ground, with shades and broken stripes of vermilion red; many small russet dots, with occasional deep indenture and patch of russet; stem short, slender, set in an open but deep cavity; ealyx with half-open segments; basin broad, moderately deep; tlesh white, fine-grained, moderately tender; mild sub-acid, with a rich, peculiar aroma and flavor; very good; cone small; seeds plump; season, November to March.

Rochester Pippin.—This is an apple brought to notice by the Western New York Horticultural Society.

It is of full, medium size; roundish, oblique, oblate; greenish yellow; flesh breaking, pleasant sub-acid; winter.

Rose Red.—John J. Thomas notes this as an apple originating in Egypt, Monroe County, N. Y., and ripening in September.

Sedgwick.—This apple is described by Thomas, as follows: Grafts were sent me some years since, by Lewis Jones, of Centreville, Ind., which bore the past season fine specimens, and were of very good quality.

Fruit large, roundish; oblate; yellow, covered with deep, rich red, and obscurely splashed and striped with a darker line, and many light, irregular shaped dots; stalk slender, inserted in a large and broad cavity, russeted, which often extends in rays beyond the

cavity; calyx closed; basin large, uneven; flesh yellowish, a little coarse, juicy, tender, mild sub-acid, rather rich, slightly aromatic; quality very good; core small.

Mr. Thomas also describes the following, which is probably no more nor less than the *Tuttle*, of Downing; and reference to Mr. Thomas' descriptions of *Tuttle* and *Tuttle* of *Geneva*, indicate thereof; but we give Mr. Thomas' description of

Tuttle of Genera.—Grafts of this were sent me some years since from Geneva, N. Y., from Mr. Tuttle, but I know nothing of its origin, growth or bearing qualities.—It produced fruit the past season, which was of very good quality.

Fruit medium; roundish oblate, slightly angular; pale yellow, moderately sprinkled with brown dots; stalk short, slender, medium cavity; calyx closed; basin abrupt, deep, corrugated; flesh white, fine, tender, juicy, pleasant sub-acid; quality very good; core small.

The following also comes from John J. Thomas:

Schuyler's Sweet.—A large, showy apple, ripening in October, originated on the lands of Rensselaer Schuyler, Seneca Falls, N. Y.—Tree in vigor and form resembles the Baldwin, and is productive.

Fruit large; roundish, inclining to roundish oblate; pale yellow, with a few scattering brown dots; stalk slender, inserted in a large deep cavity; calyx closed; basin large, deep, slightly corrugated; flesh whitish, half fine, tender, moderately juicy, pleasant sweet; quality good to very good; core small.

Furnas Apple.—From Col. R. W. Furnas, Brownsville, Nebraska, we have a new apple which, by the Colonel's friends, has been named the Furnas.

It is of full medium size; roundish oblate conical, slightly oblique; pale yellow ground, marbled and blotched in sun with vermilion red dots, scattering, many of them sunken, as it were, with a dull cast, as of bitter rot; stem set in a regular, deep, yet open cavity; calyx half-closed, with pointed, half-recurved segments; basin irregular, abrupt, and moderately deep and smooth; flesh whitish, half coarse with a spongy grain, a sharp sub-acid and void of aroma; good to almost very good; core medium; decay at outer line; seeds abundant.

Col. Furnas writes that "this season we have no fruit, yet the *Furnas* is well laden. On the ground of production, when no others fruit, it may be a valuable sort, otherwise we can see no good in it, as compared with many old sorts known too well in Nebraska."

Whitescarrer.—John Saul, Washington, D. C., sends an apple under the name of Whitescarrer. It is of large size, with a smooth surface, only blurred or marred by the peculiar green mold which belongs to all our Southern grown apples. In quality it is just of that crispy, breaking, tender, mild, juicy, sub-acid flesh which generally pleases all. Of its history, Mr. Saul writes, "that it originated in the grounds of a gentleman by name of Whitescarver, in Rappahannock County, Va., and was named after him. The tree is a good grower and bearer."

Fruit large; form oblate roundish; color, pale yellow green, with a few scattering specks or dots, irregular in size, which on the sun-exposed side are carmine, and on the shade side dark green, with a suffused white surrounding; stem short; cavity narrow; calyx small, closed; segments usually erect, sometimes slightly recurved; basin moderately deep; broad at base; flesh yellowish-white, moderately fine grained, crisp, tender, juicy, pleasant, sub-acid; very good, almost best; core large, open, hollow center; seeds quite pointed; season November and December.

Alsernou's Early.—From Suel Foster; origin said to be Columbiana County, Ohio; as early as Early Harvest; more acid and better for cooking, but not as good an eating apple; slow grower, with thick, stout limbs. Fruit of medium size; oblate; pale yellow; flesh white, tender, juicy, brisk sub-acid; good.

Bailey's Crimson Crab.—Originated with Wm. II. Bailey, Plattsburgh, N. Y. Tree vigorous, upright, very productive and very handsome.

Fruit medium or large for its class; roundish, inclining to conic; skin yellow, shaded over the whole surface with deep rich crimson; flesh similar to other Siberian crabs.

Mahaska or Miller Apple.—Raised by Abram Miller, of Black Oak township Mahaska County, Iowa.—Tree moderately vigorous, spreading, productive.

Fruit large; roundish oblate; skin whitish-yellow, shaded, splashed and striped with light and dark rich red; flesh whitish, half-fine, tender, juicy, mild, rich, sub-acid; very good; ripe January to March.

Pen.—Said to have originated in the borough of Columbia, Pa., on the premises of the Misses Betsey and Emily Wright, near a hop pen, hence its name. This is distinct from Wm. Penn, and a larger and better fruit. Some claim it to be Baldwin, while others say it is distinct and a better fruit.

Fruit large: roundish oblate, slightly conic: skin yellow, nearly covered with dark rich red; flesh yellowish, tender, juicy, mild, rich, sub-acid; very good; ripe from December to March.

Stribling, - Originated with the late William Stribling, Medon, Tennessee. Tree vigorous, forming a round head; an early and abundant bearer.

Fruit medium; oblate; skin whitish, nearly covered with broad splashes and stripes of deep rich red, almost purplish in the sun; tlesh white, tender, moderately juicy, mild sub-acid; good to very good; ripens just after Early Harvest.

Gorin's Russel. Supposed origin, Hartford County, Ky. Described by F. R. Elliott in Rural New Yorker, March 48, 1871. A winter apple, of medium size, dull crimson russet color, very good in quality.

Boyd.—First described by Warder, in Ohio Transactions, 1869, afterward by Elliott, in Rural New Yorker, with history, giving origin Monroe County, Ky.—Late winter.

Curiosity.— Described in Western Farmer, as originating at Waupun, Wis. Valued for cooking.

Monul Gilead Beauly.—Originated from seed planted by Johnny Appleseed, in Mount Gilead, Ohio, and described by F. R. Elliott in Rural New Yorker, 1871. A winter sort; of medium size: yellow, with red; aromatic sub-acid.

Pyle.—Origin, Delaware County, Pa., and described in Gardener's Monthly as valuable for cooking, and as keeping well during winter.

Early Queening.—Described by Dr. Stayman in Weslern Pomologist, as valuable during July, and as having come from Dr. Waring, of Tyrone, Pa.

Berry.—A variety of the crab, described by Elliott in Rural New Yorker, 1870, as from Minnesota. Small, and of little value.

Galena.—A crab or Siberian apple, originated at Sabula, Iowa, and described by Elliott in Rural New Yorker. Not valuable.

Hiawatha.—Originated at Fond du Lac, Wis. Described by Elliott in Rural New Yorker, 1870, as of medium size; roundish; dull yellow and blush. Second quality.

Simmons.—Originated at Fond du Lac, Wis., and described by Elliott as small, good, maturing mid-summer.

Onarga.—Described in Western Rural as the product of Mrs. Diana Harper, Onarga, Ill. Of medium size; round, oblate; red striped; quality very good; October to January.

Pewaukee.—Originated at Pewaukee, Wis. Described by O. S. Willey in the Horli-culturist, as of medium size; round, obovate; with yellowish-white flesh; sub-acid flavor; in use from January to June.

Semper.—Originated with E. Ware Sylvester, Lyons, N. Y., and described by Elliott in Rural New Yorker, 1870, as of medium size; roundish, oblate, conical; sub-acid; and a long keeper.

Newrille.—This variety is of Pennsylvania origin, and supposed to have originated from trees planted by the father of the present Commissioner of Agriculture, Wm. Ramp. It has been called Sharp's Apple, Sharp's Seedling and Sharp's Mountain. Specimens sent to F. R. Elliott, in 1870, caused him to make description in Rural New Yorker, under name of Newrille, as a very good apple; an early winter.

Otoe Red Streak.—Originated in Otoe County, Nebraska. Forwarded to F. R. Elliott by R. W. Furnas, and by Elliott described in Rural New Yorker, 1870. An apple of fine size, great beauty and superior quality in its section of origin; October to January.

Noyes.—Introduced by O. H. Brown, of Minot, Maine, and described by Elliott in Rural New Yorker, who says it is below medium size; roundish, oblate; red; with a tender, juicy, mild, sub-acid tlesh; in season, November to February.

Briar Sweet.—A variety of the Siberian crab, brought to notice by A. G. Tuttle, of Baraboo, Wis., and described by Elliott in Rural New Yorker. Size large for a crab variety; oblong, truncate; yellow and red; with a mild, sweet, tender flesh; September.

Pride of Minneapolis.—Originated by James Wyman Elliott, in 1855, and described by F. R. Elliott in Rural New Yorker, 1870, as about size of large yellow Siberian crab; pale yellow; and in season, October.

Pride of the Prairie.—From the same source as above, and by the same describer; greenish yellow; good to very good.

Winter Gem.—One of C. Andrews' introductions; noted in Rural New Yorker; sharp sub-acid; good.

Mollie.—Claimed to have originated at Lake Minnetouka, Minnesota, from seed of the Duchess of Oldenburgh: and described by Elliott in Rural New Yorker, as of medium size; oblate; pale yellow green; flesh half-tender, mild sub-acid; November and December.

Reliance.—Introduced by G. N. Smith, of Wisconsin, and described by Elliott in Rural New Yorker, as belonging to the class of Colvilles, and of good to very good quality.

Northern Blush.—This is another of G. N. Smith's introductions; described by F. R. Elliott, as of medium size; pale yellow, with blush in sun; flesh hardly good; December.

Quaker Beauly, Hooper's Blush, Beacher Sweel and Slewart's Sweel, are all of the Siberian class, described by Elliott in Rural New Yorker, 1870.

Orange, Angular, Conical, Hulchinson's Winler Sweet and Eureka, are also of the Siberian class, and described in Rural New Yorker, 1870, by Elliott.

Sherman's Sweet.—Introduced to notice by H. T. Brooks, of New York, who claims its origin in Wyoming County, N. Y., and describes it as of medium size; greenish yellow; with a half-tender, juicy, sweet flesh; November to January.

The Genera or Lady Elgin is of the Siberian, and described by Thomas in the Country Gentleman, as of value almost comparative with Lady Apple, ripening eatable early in autumn, and keeping until midwinter.

Skinner's Seedling is described by the San Jose Agriculturist, as a new California apple, grown from seed sown in 1854; valuable from the middle of August to the middle of September.

Poller's Early.—Described by Flagg in, Tillon's Journal of Horliculture, as small to medium; very good; and ripe early in July in Southern Illinois.

#### PEACHES.

Richmond.—Originated by and with Dr. Sylvesfer, of Western New York, and described by Elliott in Rural New Yorker and in Horlicultural Annual, 1870.

Lawrence.— Introduced by Wm. K. Tipton, Jerusalem, Monroe County, Ohio, who says it is of the size and superior quality of Hale's Early, and ripens six to eight days earlier.

Southwick's Late. Origin, Dansville, N. Y. Described in Tilton's Journal as large, roundish, yellowish white, with white flesh; freestone; season, last of September.

#### PLUMS.

Imperial Washington. Described by O. S. Willey, as a seedling of G. P. Peffer, Pewaukee, Wis.; of a red color, with light yellowish specks; thesh greenish yellow, tender, half separating from stone; productive; September.

Blue Tweens is described by the writer above named, as very hardy; of good quality; October.

## STRAWBERRIES.

Mary White. Originated with Matthew Crawford, Ohio; is after the style of Jennings White, and described by Elliott in Rural New Yorker, 1870.

Sterling.--Same origin and reference as above.

Margaret.—Same origin and reference as preceding.

### PEARS.

The Wellz Pear.—Originated at Wilmington, Ohio, and described by F. R. Elliott in Moore's Rural New Yorker, of 15th April, 1871, as a pear of large size; oblong, obovate, pyriform; and quality only good for cooking.

Eliof's Eurly.—Raised by Judge Chas. Eliot, of Petite Cote township, Ontario. Tree vigorous, hardy and very productive; ripens a few days before Madeline, of which it is said to be a seedling. Fruit small; pyriform; skin pale, greenish yellow, with a shade of brownish red when exposed to the sun; flesh whitish, juicy, melting sweet and a little perfumed; good to very good; July.

#### CHERRIES.

James Dougall, of Windsor, Ontario County, Canada, sends us, 20th of June, 1871, a seedling cherry, which he writes, "is a decidedly Weeping Bigarreau." and he has given it the name of Weeping Napoleon or Napoleon in Elba. It is a great bearer, and the main stalk is ten feet high, from whence the branches commence, and droop as they grow, like an umbrella or Weeping Kilmarnock Willow. The young trees propagated from it are very pendulous, and should be propagated on high stems. Mr. Dougall also writes, that he has a seedling from Early Purple Guigne, larger and more round in the berry, and ten days earlier. The color is similar, the flavor better, the leaf larger and broader, and the twigs not pendulous.

GRAPES.

Kalamazoo.—Said to have been raised from seed of Catawba, by Mr. Dixon, of Steubenville, Ohio. Vine vigorous and very productive; bunch large, long, often shouldered, compact; berry large, round, dull red or chocolate color, with a lilac bloom; skin thick; flesh soft, not quite tender all through; sweet, but not as rich as Catawba. It is said to ripen ten days earlier.

To the above we add the report of the temporary Committee on the New Fruits exhibited at Richmond.

RICHMOND, September 8, 1871.

To the President and Members of the American Pomological Society:

The Committee on Native Fruits respectfully report, that the following new varieties on exhibition have been examined by them:

### APPLES.

By J. Ravenscroft Jones, Brunswick County, Va.: Mason's Stranger: unripe; examined in February by one member of the Committee, who thinks highly of it. *Pilot*; unripe. Eight unmained seedlings; unripe.

Dinwiddie.—From W. W. Dinwiddie, Albemarle County, Va.

Brown's Seedling.—F. Davis & Co., Rockbridge County, Va.

Sharp.—Chester County, Pa. Summer apple: tender; juicy; good.

A Seedling.—W. W. Dinwiddie, Albemarle County, Va. Fair looking; unripe.

Seedlings from II. B. Jones, Rockbridge County, Va. Some fair looking, but all unripe.

Seedling.—G. W. Purvis, Nelson County, Va. Fair looking; unripe.

Via.—By Dollins & Bro., Albemarle County, Va. Good.

Also by the same firm: *Yancy's Prize*; good to very good. *Malilda*; good to very good. *Rayland*; very good.

Baker.—By Parker Earle, Cobden, Ill.

Red Sweet Pippin.—By Parker Earle, of Illinois.

Nebraska Seedling No. 1.—Col. Furnas, Brownsville, Nemaha County. Good.

Nebraska Seedling No. 2.—Col. Furnas. Scarcely good.

Nebraskian,—J. H. Masters, Nebraska City. Good.

Garden Beauty.—By P. A. Jewell, Minneapolis, Minn. Good.

Forest Queen.—By the same. Good.

Kansas Queen.—Raised by B. Atkinson, and exhibited by Dr. Stayman, Leavenworth. Very handsome; quality good; over ripe; promising well.

Kansas Bellefleur.—Dr. Stayman. Very good.

Konsas Pippin.— Dr. Stayman.

PEARS.

Twenty-four Scedlings. From F. & L. Clapp, Boston, Mass. Of promising character, but flavor impaired by the packing material.

#### PEACHES.

Five Seedling Clings.—From G. W. Purvis, Nelson County, Va. Not ripe.

A large quantity seedlings, from Mr. Linderman, Grand Rapids, Mich.; but no numbers or names by which any one can be referred to.

The same is to be said of Seedlings, by J. H. Masters, Nebraska City.

#### PLUMS.

Seedlings from P. A. Jewell, Lake City, Minnesota.

#### GRAPES.

Hybrids, by Dr. A. P. Wylie, Chester, S. C. A large collection of these were offered by Dr. Wylie. They were for the greater part of such excellent character, as regards flavor and general appearance, as to preclude the Committee from deciding which were the best. One, however—Peter Wylie, No. 1—was of a particularly excellent character. The Committee feel that too much can scarcely be said in praise of Dr. Wylie's persevering efforts in the improvement of the grape.

Scuppernong Seedling.- By John Hopkins, Wilmington, N. C.

Secretary.—By Jas. H. Ricketts, Newburgh, N. Y. Not ripe.

Concord Hybrid Seedling.—G. W. Campbell, Delaware, O. A white variety, with Chasselas Musque for its male parent. Bunch medium; berry medium to large; flavor very good; promising well.

From the same: Another Seedling Hybrid. White; bunch medium; berry large; also promising well.

P. J. Berckmans, Chas. Downing, Thomas Meehan, W. C. Flagg, P. T. Quinn,

Committee.

## REPORT OF COMMITTEE ON FOREIGN FRUITS.

Since the last session of the Society, a very small number of foreign varieties of fruits, worthy of commendation, has come to the notice of your Committee. Some of the pears mentioned in the last report, as being introduced from Europe with high recommendations, but not then fruited in this country, have since been tested to a limited extent. Of these

Beurré de l'Assamption and Sourenir du Congrès are the most important. Both these varieties promise to be valuable acquisitions. The trees are vigorous and fruitful, and the fruit of large size and good quality. Duchesse de Bordeaux has also been fruited in several localities, and promises to be a good late pear, but requiring good soil and warm season and climate to bring it to perfection.

The following varieties have been finited last year and this:

Duchesse Précoce.—September. A large pyramidal, handsome fruit; skin greenish yellow; flesh melting, juicy, sprightly. Will rank as good, and, on account of size and appearance, will make a good market fruit. Tree a moderate grower, and very prolific.

Longue de Bosquet.—September. Fruit medium size, conical, regular, not unlike Tyson; skin yellow, with red cheek; tlesh greenish or yellowish, melting, juicy, sprightly, excellent.

Loriol de Barney.—September. Fruit medium size; resembles Sterling, but darker, covered with light streaks of red. A fine, melting pear, and a vigorous grower.

Bonne de Puils, Ansault.—September. Size medium to large; skin russet, like the Golden Beurre of Bilboa; flesh melting, juicy and very fine grained; sweet, with a rich flavor and aroma. A first class fruit. Tree a vigorous grower.

Thérèse Appert.—Described by F. R. Elliott in Rural New Yorker, as first fruited in this country by Ellwanger & Barry. It is obovate, pyramidal; yellowish; with a flesh slightly granular, melting, rich and juicy; ripening in October. Tree a good grower.

Delices de la Meuse.—Described in Le Roy, and again by Elliott, with a figure, in Rural New Yorker, July, 1870.

Beurré Woronzon.—Described by Elliott in Rural New Yorker, 1870, as of medium size; obovate, pyriform; juicy, but only good in quality.

Calebasse d'Octobre.—October. Fruit large, long, pyriform; skin smooth, pale yellow, with a fine ruddy tint on one side; flesh melting, fine grained and juicy. Tree vigorous.

Maurice Desportes.—October. Size medium to large; pyriform, tapering to a point at stem; of a dull yellow color, with russet streaks, mottled a little like Paradis d'Autonne, but less russet; flesh tine grained, sweet and melting; not high flavored. A good grower.

St. Francois Seigner.—A foreign variety, finited by Ellwanger & Barry, in 1870, and described by Elliott in Rurat New Yorker, as of medium size; roundish, oblate, conical; dull yellow, with stripes of red in sun; flesh coarse, and only good.

Pilmaston Duchesse & Angouleme.—Originated at Pitmaston, England. First fruited in this country by John Saul, Washington, D. C., in 1870, and described and figured by Elliott in Rural New Yorker, as of large size; pale yellow, marbled with cinnamon russet; with a buttery, rich, juicy, sweet flesh. Early October.

Mme. Bupliste Desportes.—October. Fruit medium to large; roundish oval; skin yellow, marked with russet; flesh very fine, melting; similar in flavor to Edmonds; first rate. A medium grower.

Henri Desportes.—September. Of medium size; turbinate; greenish yellow; jnicy, melting, sprightly; will keep well.

Huyshë's Prince of Wales.—November. Medium to large; form oval, with stalk over an inch long; skin dull yellow, with russet specks; flesh white, rather coarse, vinous, juicy and rich.

Dr. Lindley.—November. Size medium; skin smooth and yellow; flesh crisp and sweet.

Plantagenet,—October. Medium size; skin greenish yellow; flesh melting, sweet, vinous, juicy, excellent; will rank as best.

Mme. André Leroy.—Fruit large; skin thick, greenish yellow, with small dots and mottled on one side with red; flesh fine, melting, very juicy, sprightly something like Duchesse; very good. Fruited, 1871, by Ellwanger & Barry. Figured and described by Elliott in American Rural Home.

Aimé Oyereau.—September. Medium size; form roundish, often with a suture on one side from stem to eye; color yellow, with russet dots, washed with red on one side; flesh white, melting, juicy, excellent. Ripens with Bartlett, and promises to be a handsome, excellent fruit, especially for the amateur.

Modame Treyer.—September. Size medium; pyramidal; color olive yellow, sometimes marked with fawn color on shady side, but reddish on opposite side; juicy, sweet, melting, perfumed. A first class pear.

#### PEACHES.

Salway.—First introduced to notice by Thomas Rivers, England, and first fruited in this country by H. H. Hunniwell, of Wellesley, near Boston, and first described in this country by F. R. Elliott.—It is a variety of considerable promise, for all Southern peach growing localities.—It is large to very large in size; creamy yellow; with a thick deep yellow flesh, stained with red at the stone; and in season, according to climate, from 1st October to 10th November.

Quite a number of varieties of apples from Northern Europe, especially from Russia, have recently been imported, but none of them are yet sufficiently tested to justify a notice of them.

No new cherries or plums worthy of notice. Many new varieties of peaches, from France and England, have been received within the past two or three years, but they are not vet satisfactorily tested.

New strawberries continue to be introduced, especially from France. Napoleon III and a few others have, in rare instances, been reported as successful; but, in general, they are of little value in our climate.

GEORGE ELLWANGER,

Chairman of Committee.

### DISCUSSION ON PEARS.

The reports of Committees being received, read, and referred—as see preceding pages—the Society took up the values of pears, which, on motion of members, were ordered to be starred in the Catalogue as follows, viz.:

Bartlett received \*\* for Georgia, Alabama, Kansas, Virginia, Iowa, District of Columbia, Maryland, Illinois, Kentucky, Nebraska, New Jersey, Rhode Island and—some one said—"for all other States."

Belle Lucrative received \*\* for Middle Georgia, South Carolina, District of Columbia, (Savi. asserting that it is one of the best pears in the District,) and Maryland.

Quinn, of New Jersey.—We can not sell it in the New York market. It is worthless as a market fruit, and I can not recommend that it be planted for such purpose.

Wier, of Illinois.—Would give it \*\* for family use for Illinois, but none for market purposes. It received \*\* from Kansas, Rhode Island, Alabama and Connecticut, for home use, and \* from Michigan and South Carolina for the same purpose.

Mr. Saul said he starred or double starred a variety, looking to its value for a gentleman's own use. He had nothing to do with valuing a fruit for the New York market, and did not intend that his judgment, relative to the quality and value of a fruit, should be predicated on the public taste, or general market value. What he worked for, and supposed the Society was toning to, was the quality of a fruit, combined with its character of growth, productiveness, &c., to make product for the delicate and refined tastes of the lovers of fruit. He had no knowledge of, and cared less, for what the public, as a mass of roughs, demanded in the New York or other markets; that was a point, as he counted it, aside from what was designed to be taught in the designation of varieties of fruits, recommended by the American Pomological Society.

If this were understood, then there would be a Market and an Amateur List in the Catalogue, which he favored.

Messrs. W. C. Barry and Chamberlain agreed with Mr. Saul in the value of a record for amateurs, as well as market culture.

Mr. Bragdon thought, and moved, that there should be one star for market, and two for family use. The motion was carried, and, to a certain extent, the principle was acted upon, in starring a few varieties, but, after a time, it was again lost.

Mr. Flagg gave the Belle Lucrative \*\* for family, and \* for market.

Earle would not give it any for market.

Kansas gave \*\* for family, and \* for market; Michigan, \* for family; Nebraska, \* for family; Rhode Island, \*\* for family; Alabama, \*\* for family, and \* for market; South Carolina, \* for family; Connecticut, \*\* for family.

Bloodgood received \* from Hlinois, South Carolina, District of Columbia, Maryland and Virginia, for all purposes.

Buffum received \*\* from Virginia for family use, and \* from District of Columbia, Kentucky, Maryland, Rhode Island and Illinois, for family and market purposes.

Doyenne d' Ete received \*\* from District of Columbia, Maryland and Virginia, for family use; \*\* from New York and Alabama, for market and family use; \* from Rhode Island and Illinois.

Elemish Beauty received \*\* from Iowa, Nebraska, North Illinois, Kentucky, South Carolina, Virginia, Maryland and Michigan for home and market use, and \* from Alabama. It was reported as cracking badly in Massachusetts.

QUINN, of New Jersey, knew the pear sixteen years ago, and would have given it all the stars then. Now it was one of the meanest pears cultivated. It sheds its leaves prematurely, and the fruit cracks badly.

Paul, of Massachusetts, says it has been more popular in West Massachusetts, Southern Vermont and Eastern New York than any other pear, except Bartlett. Hardy tree and good bearer. Within a few years, in a few sections, on poor soils, it has cracked.

King, of Virginia.—In the Potomac region it is one of our best pears. Eastern Massachusetts, Rhode Island and Connecticut refused to \* it.

Kingsessing received \* for District of Columbia, Maryland, Rhode Island, Virginia and Pennsylvania.

Rosticzer received \* from Southern Illinois, District of Columbia, Virginia, Maryland, Massachusetts, Connecticut and New Jersey.

Seckel received \*\* from Massachusetts, District of Columbia, Maryland, Illinois, Kansas, South Carolina, Virginia and Rhode Island, and \* from Michigan, New Jersey and Pennsylvania.

Urbaniste received \* from District of Columbia, Maryland, Rhode Island (for home use,) Massachusetts and Virginia.

Beurre Bose received \*\*\* from Connecticut, Maryland, District of Columbia and Illinois, and \* from Southern Illinois, Rhode Island, Massachusetts, New Jersey and Michigan.

Howell received \*\* from District of Columbia, Maryland, Virginia, Iowa, Nebraska, Pennsylvania and Illinois, and \* from Michigan.

Benrre d'Anjou received \*\* from Massachusetts, Rhode Island, District of Columbia, Maryland, Virginia, Kansas, Iowa, Northern Illinois, South Carolina, Michigan, Western New York and New Jersey, and \* from Southern Illinois.

Beurre Clairgean received \*\* from Rhode Island, (for home use,) District of Columbia, Maryland, Virginia, Georgia and South Carolina, for market; and \* from Illinois, New Jersey, Connecticut, Michigan and Massachusetts.

Quinn, of New Jersey, asks if it sheds its leaves prematurely—say before the middle of August—with any of the gentlemen present.

Elliott, of Ohio.—Not with me.

NEWMAN, of Georgia.—With us it matures its fruit perfectly before shedding its leaves.

Beurre Diel received \* for Kansas, District of Columbia, Maryland, Virginia, Iowa, South Carolina, Kentucky and Nebraska: Rhode Island, New Jersey and Massachusetts refusing to star it.

Beurre Easter received \*\* for Virginia, Southern Iowa, and \* for Northern Virginia.

Beurre Superfin received \*\* for District of Columbia and Middle Georgia, and \* for Rhode Island and Massachusetts.

Wier, of Illinois.-It should not be allowed to ripen on the tree.

Doyenne Boussock received \* for Rhode Island, Kentucky, District of Columbia, Maryland, Illinois and Iowa.

Duchesse d'Angouleme received \*\* for Virginia, Iowa, South Carolina, Massachusetts, Illinois, District of Columbia, Maryland, Kansas, Kentucky, Rhode Island, (on quince stocks,) Nebraska, New Jersey, Pennsylvania, Georgia, Alabama, and \* for Connecticut.

Lawrence received \*\* for New Jersey, Rhode Island, District of Columbia, Kentucky, Maryland, Alabama, Iowa, Connecticut and Pennsylvania.

King, of Virginia.—Grown on gravelly, light soils; with us it is early; has a smooth skin, and good flesh; on clay soil it is coarse flesh and rough skin.

Onondaga received \* for Rhode Island, Kentucky, District of Columbia, Maryland, Kansas and Massachusetts.

Louise Bonne de Jersey.—Leighton, of South Virginia —My experience is that one-fourth of its fruit cracks, balance gets good size; tree sheds its leaves three or four weeks before the fruit matures. It received \* for Kentucky, Iowa, Connecticut, Massachusetts, North Virginia, Illinois, South Carolinia, Maryland and District of Columbia.

King, of Virginia -- Though a first-class pear, I fear it is failing with us.

Sheldon received \*\* for Rhode Island, District of Columbia, Kansas, Massachusetts, Maryland, Virginia, Illinois, and \* for Kentucky and Alabama.

Adjourned.

# THIRD DAY.

## MORNING SESSION.

The Society met, pursuant to adjournment, at nine o'clock in the morning.

## INVITATION FROM THE COMMISSIONER OF AGRICULTURE.

An invitation was received from the Commissioner of Agriculture, Hon. Frederick Watts, to visit the Agricultural Department grounds and buildings, on their return homeward from the meeting. Accepted, and thanks returned.

The discussion on Strawberries being in order, was spoken of as follows:

Wilson's Albany received \*\* for Georgia, South Carolina, Virginia, Alabama, Nebraska, Minnesota, Florida, New Jersey and Rhode Island.

Col. Hardee, of Florida, says it is almost a perpetual bearer in Florida, and our most popular strawberry.

District of Columbia refused to \* it.

President Wilder says it is growing in favor in Massachusetts; Concord, Mass., sends two hundred bushels of it per day to the Boston market.

SAUL, of the District of Columbia.—It bears well with us, but is so much inferior in quality to other good growing varieties, that people will not purchase it in market. On our firm soils it grows well.

Chamberlain, of Northern Virginia.—We cannot grow strawberries in our locality at all, while near us they are grown in abundance.

Col. Hardee, of Florida.—One objection to it is that it does not propagate well. We cannot do without it, however.

Quinn, of New Jersey.—After an experience of fifteen years, I can say that for every half-acre of all other varieties of strawberries planted in New Jersey, there are one hundred acres of Wilson's Albany.

Langdon, of Alabama.—Have had an experience of fifteen years with it in Alabama; for several years had a monopoly of the Mobile market. There is no strawberry to compare with it for quality and profit. It is a very perfect fruit. We grow it on sandy soil with clay subsoil. It is superior in flavor with us to those grown

North. In the South, if the fall is warm, we get a winter crop from it, and from no other variety of strawberry. It also bears from the middle of April to the middle of July.

Berckmans, of Georgia.—It is the only berry worth cultivating with us. It is in our market, in Augusta, in December; excellent for shipping. Fifteen years ago there was not such a thing known as a strawberry in our market; now we are supplying thousands of bushels, with great profit.

Col. Hardee, of Florida.—I will challenge any other variety to produce one twentieth the amount of fruit this produces in Georgia. I have sold it at five dollars a pint.

Schley, of Savannah, Ga.—With us it is the best berry we have; it stands all the tests with more endurance than any other berry.

Masters, of Nebraska.—It is the most reliable berry we have. In dry locations it does not produce foliage enough; but on the bottom lands it is all right.

Wier, of Illinois.—If the Southern gentlemen who complain that it does not propagate, will cover their plantations lightly with mulch, after the bearing season is over, they will find it will start runners.

Page, of Virginia.—It is one of the finest and most profitable berries we have at Norfolk. We have shipped two million baskets of strawberries this season, two-thirds of which were Wilson's Albany.

Barnes' Mammoth.—Berckmans—For Middle Georgia, for an early berry, I give it \* only. It also received only \* for Virginia, District of Columbia, Maryland and Alabama.

Stuart received \* for Middle Georgia (extra early, Berckmans says) and Virginia

Agriculturist received \* for Georgia, Alabama, Kentucky, Virginia, District of Columbia, Maryland and Nebraska.

Longworth's Prolific, Berckeans says, is the finest early berry we have in Georgia, and gave it \*\*. It also received \*\* for Alabama and California, and \* for Maryland, District of Columbia, Illinois and Kentucky.

Triomphe de Grand received \*\* for District of Columbia, Georgia, Alabama, and \* for Massachusetts, Nebraska and Illinois.

Masters, of Nebraska.—It is an excellent berry, but a poor bearer.

Wier, of Illinois.—It is good on strong soils, with high cultivation.

Lennig's White, received \* for Georgia and \*\* for New Jersey, for amateur culture. Savl, of District of Columbia.—It is a beautiful fruit, and adapted to amateur culture in the District.

Boyden's No. 30.—Quinn, of New Jersey-Give it \*\* for our State; it is the most promising new fruit on the list; outsells all others in the market.

It also received \*\* for Illinois, and \* for Eastern Pennsylvania, District of Columbia, Alabama, Kentucky and Massachusetts.

Charles Downing received \*\*\* for District of Columbia, South Carolina, Maryland and Kentucky, and \* for Pennsylvania, Illinois, Georgia, Alabama and New Jersey, Quinn remarking, for the last named State, that it promises to become a leading market variety.

Kentucky received \*\* for Kentucky and Georgia, Berckmans of Georgia, remarking that it is a highly flavored and excellent market berry, but the season is not so long as that of the Wilson's Albany. It also received \* for Illinois and Western New Jersey.

Wilder,—Berckmans, of Georgia, says it is a remarkably fine berry, but our climate is too hot for it.

SAUL, of District of Columbia.—One of the most promising we have; of high quality, productive, but requires high culture.

Quinn, of New Jersey. -- A shy bearer, of excellent quality, but not promising.

Landbon, of Alabama.—Have cultivated it two years.—It is perfectly satisfactory in regard to foliage; quality very good; colors well; medium as to productiveness.

MEERAN, of Pennsylvania.—Promising; foliage vigorous; fruit of excellent quality and beautiful.

Wilder, of Massachusetts.—My object was to get the perfect form and beauty of La Constante, with the good qualities of Hovey. Got the beauty of color and perfection of form. It ripens a berry at a time. Does not produce so well the first year as subsequently.

Scedling Eliza - Saul, of District of Columbia.—This is one of our best varieties in the District of Columbia and Maryland, and give it \*\* for both Maryland and the District.

Berckmans, of Georgia.—It is excellent, but does not produce well enough with us. It is large and of good flavor; foliage fine; \* for Georgia.

Languon, of Alabama.—I have cultivated it. Out of one hundred and three varieties of strawberries that I have tested, have selected about a dozen to keep. This one is not among the dozen, because it is not good enough.

Campbell, of Ohio.—It is unproductive in Ohio; otherwise good.

Green Prolific.—Masters, of Nebraska.—It is excellent and profitable with usone of the best. Give it \*\* for Nebraska.

Illinois also gave it \*\*.

Quinn, of New Jersey.—Very profitable berry, if grown near market; does not carry well. \* for New Jersey.

Wilder, of Massachusetts.—It is a female plant, and must have a male alongside of it if it produces.—I do not recommend the planting of pistillate strawberries.

QUINN spoke of New Jersey as the cradle of small fruit culture. The Wilson is the popular market sort.

Mr. Gillingham, of Virginia, was a native of New Jersey, and first introduced strawberry culture there.

Langdon, of Alabama.—Nothing like Wilson for profit; bears from April to July. The President said Alabama was much like California in her fruit products.

Berckmans says the Wilson is best of all for the South; bears great part of the year; best for shipping and sale.

Mr. Flagg spoke of the Wilson as having done much for strawberry culture.

Judge Schley, of Georgia, remarked favoring mulching on sandy soil, especially at South.

This closed the discussion on strawberries.

## DISCUSSION ON PEACHES.

Hale's Early.—Berckmans, of Georgia.—It does not rot with us. We regard it the best early peach ever originated. It received \*\*\* for Georgia, District of Columbia, Kansas and South Carolina.

Langdon, of Alabama.—After having high hopes for it in Southern Alabama, Lonisiana and Mississippi, it has proved a dead failure. It commences rotting before ripening, and we get no crop. In Middle Alabama and Northern Mississippi it has done well.

Quinn, of New Jersey.—It is losing ground in New Jersey, and growers are giving it up; also in Delaware, on the peninsula. It rots badly.

Berckmans, of Georgia.—I have received reports from nearly every part of Georgia, and it seems to do well generally. Locality has much to do with its rotting. In Arkansas, on rolling lands, it does nicely. In our market the early peaches were all excellent, and all Hale's. Ten days after, when the later varieties came in, peaches were wormy and imperfect. It is excellent for market, and especially for shipping. Three years ago we got twenty dollars per half bushel for it in New York city.

Wier, of Illinois.—Where the peach rot is prevalent, I suggest that growers add four pounds of sulphur to a half bushel of unslacked lime. Slack the lime, and strew it over the tree, and on the ground under the tree, just before the peaches begin, or are expected to begin, to rot.

Dr. Howsley, of Kansas.—In Kansas it is one of the most valuable peaches we have. It goes into market and sells at a high price weeks before it is fit to eat. Mine stand on soil embedded in shale or gravel. It is the most popular and profitable peach we have.

Flage, of Illinois.—It has no rival, for there is no peach that ripens at the same time. It is liable to rot with us, but no more so than other varieties having the same consistency of flesh. It does not rot on the trees; it rots in the boxes after it is shipped to such an extent as to render it very uncertain as a market fruit. Its extreme earliness has induced extensive planting, and, if rot can be prevented, it is valuable.

Lamosy, of Virginia.—It is very much liked—like many a good man with a bad name—when thoroughly understood. It is a hardy and vigorous grower; bloom hardy, and stands when Tillotson dies. So soon as they commence coloring they commence to

rot. Having watched them pretty carefully, I came to the conclusion that the rotting was due to an excessive flow of sap, and resolved to check their growth by allowing grass to grow among them. The result was I secured a good crop wherever the grass grew; but wherever cleanly cultivated, either by myself or my neighbors, it tailed. I made money by allowing the grass to grow.

Wilder, of Massachusetts.—Of course we do not cultivate it in open grounds in Massachusetts, but it is excellent for forcing; nothing can be finer; did not rot this year.

MEEHAN, of Pennsylvania.—When Hale's Early was first promulgated, PARRY, of New Jersey, planted largely of it, and cultivated it thoroughly. It rotted badly, and he designed to cut up the trees: but, before he got ready to do so, the weeds had got a start in the orchard, and, to his astonishment, he got a good crop of excellent fruit.

Masters, of Nebraska.—It has not been fully tested in Nebraska; but the finest peaches grown in Nebraska were grown on trees planted in prairie sod, without cultivation; those grown on cultivated grounds have rotted. The best way to grow peaches, I am satisfied, is to grow them in grass.

EARLE, of Illinois.—The experience of the Southwestern fruit growers is that rot in Hale's Early peach, as in all other kinds of fruit, is due to the injuries of the cureulio. When grown free from such injuries they do not rot.

BERCKMANS, of Georgia -- There are plenty of curculios all over the South, and yet we do not have rot.

Chamberlain, of Virginia.—Hale's Early is the only peach that has rotted with us this season. It has been entirely free from curculio—especially so this season. It rots invariably.

Schley, of Savannah, Ga.—On our coast it is the earliest peach and largest. It is hardy. We had it ripe this year May 28. There were many specimens punctured by the curculio, and yet none rotted. There are many peaches I can not grow, that do grow in Middle and Southern Georgia.

McIntosn, of Ohio.--It rotted badly with us.

Yellow St. John.—Berckmans, of Georgia.—Give it \*\* for Georgia. In quality and appearance it compares with Early Crawford, but is three weeks earlier.

Langbox, of Alabama.—It is planted extensively on the Southern coast. It reproduces itself from seed, and hence is distributed under several local names, as Flaters, St. John. May Beauty. &c.—It is handsome, large, high flavored, free-stone, and promising in our climate.—It received \*\*\* for Alabama and South Carolina.

Early Tillotson received \*\* for Alabama, Georgia, Kansas, South Carolina, and \* for District of Columbia and Virginia.

Amelia.—Berckmans, of Georgia.—It is an excellent, large peach, but too tender for shipping.—It received \*\* for Georgia, (for home use,) Alabama and South Carolina.

Crawford's Early received \*\* for Georgia, Alabama, South Carolina, District of Columbia, Maryland, Virginia, Massachusetts, (for family use,) New Jersey, Rhode Island and Kansas.

Large Early York received \*\*\* for Georgia, Virginia, South Carolina, Alabama, District of Columbia, Maryland and New Jersey.

Troth's Early received \*\* for Georgia, Delaware, Maryland, Virginia, Alabama, Southern Illinois, and \* for Rhode Island.

Columbia, Berekmans, of Georgia, says, originated in Georgia; is extensively grown; reproduces itself from seed; is always fine; begins to ripen the 15th to 20th of July, and, (with the aid of sub varietics, produced from seed,) it furnishes fruit until the middle of September. It is a free stone. It received \*\* for Georgia, South Carolina, Alabama and Kansas, and \* for Southern Illinois, District of Columbia and Maryland.

Dr. Howsley, of Kansas, said that he is growing a peach from a Columbia seed that is a *fac simile* of it, except that it is a cling stone.

FLAGG, of Illinois, has one hundred seedlings of the Columbia, and all are essentially the Columbia, though varying a little in the time of ripening. The stone of the Columbia has a peculiar mark, by which it is always recognized by those familiar with it. It is rather tender, though more hardy than other yellow peaches.

BERCKMANS, of Georgia.—Years ago, before the Columbia was known, we used to get low prices for peaches sent to market the 10th to the 15th of July; but since we commenced shipping the Columbia, prices have greatly improved. It ships well.

FLAGG.—The quality is first rate. Its color is against it in selling. It comes in competition in our markets with Stump-the-World and late Crawford.

Susquehanna received \*\* for Georgia, South Carolina, Alabama, District of Columbia and Virginia.

Stump-the-World received \*\* for District of Columbia, Georgia, Alabama, Virginia, Kentucky, Rhode Island, Maryland, New Jersey, Southern Illinois and South Carolina.

Gros Mignonne received \*\*\* for Georgia, Alabama, District of Columbia, Maryland, Virginia and Rhode Island.

Prequet's Late received \*\* for Georgia, Berckmans stating that he had fruited it four years, and regards it the finest peach in its season. It ripens with the Smock, and is twice as large and as luscious as any peach.

Langdon, of Alabama, says it has not been generally fruited South.

Baldwin's Late received \*\* for Georgia and Alabama.

Ludy Parham (originated in Mississippi) received \*\* for Kentucky, South Carolina, Georgia and Alabama.

Mountain Rose, Berckmans says, is superior to Large Early York.

Flagg, of Illinois, had heard it highly spoken of by growers.

It received \* for Georgia and Alabama.

Chinese Cling, Berckmans says, is one of the largest peaches, peculiar in texture, and commands the highest price. It received \*\* for South Carolina, Middle Georgia, Kentucky, Alabama and Virginia, and \* for District of Columbia and Maryland.

Berckmans thinks it is identical with the peach known as Shanghai.

Lemon Cling received \*\* for Georgia, Alabama and South Carolina, and \* for District of Columbia, Maryland and Kentucky.

Indian Blood Cling, Berckmans, of Georgia, says is dark red, striped, ripeus last of July to August 15. It received \*\* for Georgia and \* for Alabama and Kentucky.

Heath Cling received \*\* for Georgia, Alabama, Virginia, Southern Illinois, Kentucky, Kansas and South Carolina.

Old Mixon Cling received \*\* for Georgia, Alabama, South Carolina, Virginia, District of Columbia, Maryland and Kentucky.

Euton's Golden Cling received \*\* for Georgia, Alabama and South Carolina. Adjourned.

## AFTERNOON SESSION.

The Society met pursuant to adjournment.

## DONATIONS TO THE SOCIETY.

In addition to the donation by Nebraska of premium received, Thomas P. James, Esq., the Treasurer of the Society, donated his offer of premium which had, by the report of the Committee, not been awarded.

J. S. Downer, of Kentucky, also tendered the Society, in like manner, his offer of premium.

Mark Miller, delegate from Iowa, remarked: "Iowa is not here with her fruit for dollars and cents. She is here to show to the world that she has the capacity to raise fruit—to raise as good apples and many other fruits as can be produced in the world," and concluded by donating, in the name of the Iowa State Horticultural Society, to the American Pomological Society, the award made.

Hon. J. B. Whitehead then offered the following:

Whereas, It is desirable that the premiums of the Society should be given in the form of medals; and

Whereas. Some of the premiums generously contributed by friends of the Society, have not been awarded;

It is hereby ordered. That all such moneys, and such other sums as may be acquired by donation be, and they are hereby, appropriated for the purpose of procuring a die for a medal of the Society.

This was received and adopted, and the following, offerred by G. F. B. Leighton, Esq., passed unanimously:

Resolved, That Hon. John B. Whitehead, of Virginia; P. J. Berckmans, of Georgia; and Thos. P. James, of Massachusetts, be a committee to procure such a die.

## RESOLUTION OF THANKS.

The President read the following resolution, offered by Judge Parker, which was adopted with applause:

Resolved, That for the courtesies and hospitalities extended by the mayor and citizens of Richmond, by the Virginia Pomological and Horticultural Society, and by all who have rendered valuable means and services, we return our sincere thanks, with a full and warm appreciation of their kindness and a hope that the bread of love they have so cast upon the waters of life may be returned to them a hundred fold.

Gene. al R. L. Page appropriately responded.

## DISCUSSION ON PLUMS.

Wild Goose.—Wier, of Illinois; Downing, of New York; Berckmans, of Georgia, and some others, spoke of the varieties of Wild Goose and other native plums, and the matter for history, etc., was referred to J. S. Downer, of Kentucky, whose report will be found on another page.

## DISCUSSION ON GRAPES.

Delaware received \*\* for Georgia, Kentucky, Massachusetts, Rhode Island, Nebraska, Minnesota, Ohio, Iowa and Virginia, and \* for Florida, Illinois, Alabama, Connecticut, New Jersey and South Carolina.

Ires received \*\* for Alabama, Georgia, Kentucky, Illinois and Virginia.

Berckmans, of Georgia, highly recommends it as an early ripening grape, and as a substitute for Hartford Prolific, ripening before the last named.

Wier, of Illinois, says with him it ripened before Hartford Prolific. It is certainly as early, and the berries do not drop off the bunch, making it a more desirable early market fruit.

Concord received \*\* for Florida, New Jersey, Illinois, Nebraska, Iowa, Connecticut, Kentucky, Kansas, North Virginia, South Carolina, Alabama and Massachusetts, and \* for Georgia.

Norton's Virginia received \*\*\* for Virginia, and \* for Georgia, Alabama, Illinois, Kentucky and South Carolina.

Herbemont, Berckmans, of Georgia, says, originated in Warren County, Ga., and four or five years ago was the main Southern grape—never failed. Latterly it rots, but we hope it may do better. It received \* for Georgia; South Carolina refusing to star it, because it rots so badly.

Black July, Berckmans, of Georgia, says, bears a compact bunch; grapes of excellent flavor, but not productive; received \* for Georgia and Alabama.

Scuppernong received \*\* for Georgia, Alabama, South Carolina and Florida.

Wyle, of South Carolina, says it does well on light soils, but not on clays.

King, of Virginia, confirms Mr. Wylie's statement, and says it does not succeed in the District of Columbia.

Flowers, Berckmans, of Georgia, says, is a late variety, and much esteemed on that account. It is the same type as the Scuppernong, not quite as good, dark color, and about same size. He gave it \*\* for Georgia, and it received \*\* for Alabama.

Thomas, Berckmans, of Georgia, says, is of light purple color, ripening before the Scuppernong, and is of the same type; \*\* for Georgia.

Wine Grapes for North Carolina and Virginia.—Saunders, of Washington, D. C., named Lenoir and Devereaux as desirable wine grapes for the mountain regions of North Carolina and Virginia. All American wines have been made from the fox family of grapes, which are not adapted to wine making. The vites astivalis possess the true characteristics of wine making—and the grapes named belong to this species—both with regard to sugar and bouquet. The reason why they have not been grown is because they do not ripen North. But they can be grown on the Virginia and North Carolina hills, and should be for wine. It has long been supposed that we have not the European oidium here; but we have it, though it is comparatively innocuous. Our mildew is unlike it, being caused by excess of moisture, while the European mildew (oidium) is caused by want of moisture.

Mish.—Baker, of Virginia, asks if any member knows aught of this variety, which is a member of the Scuppernoug family, though sweeter than any other members of that family of which he has tasted.

Clinton, Wyle, of South Carolina, says, is an excellent grape in South Carolina.

Langdon, of Alabama.—It has done well with us the past four years.

Berckmans, of Georgia.—The Clinton has failed, more or less, in Georgia.

Hartford Prolitic.—Langdon, of Alabama.—It is two weeks earlier than any other grape in Alabama.

Berckmans, of Georgia.—Ives holds its berries and ships better, and is as early with us.

Langbon, of Alabama.—Hartford brings us higher prices than any other grape—is two weeks earlier. The Ives ripens, with us, with the Concord. The earliness of the Hartford Prolific is its great recommendation with us.

WYLIE, of South Carolina.—It does well in South Carolina.

It received \*\* for Florida, Alabama and South Carolina, and \* for Georgia, Kentucky and Rhode Island.

Talman's Seedling was named by Baker, of Virginia, who hears it is better and earlier than any other grape in North Carolina, and asks if any one knows anything about it.

Berckmans, of Georgia.—It is worthless.

Martha, Berckmans, of Georgia, says, is a very nice grape, but not productive nor of very high flavor, as grown with him.

Campbell, of Ohio, says with him it is equal in health, growth and productiveness to the Concord.

Iona.—Wylle, of South Carolina, says it does fairly in certain localities in South Carolina.

Wier, of Illinois.—In some places in our State, on alluvial bottoms, it is very fine. On other soils and locations it does not do well; mildews on leaf and fruit.

MILLER, of Iowa.—I have known of good results from planting it in our State in only one instance—where it was planted on heavy, blue clay soil, and perfect grapes were there obtained. It is the only case of success I know of in Iowa. It cannot be wintered with us.

Masters, of Nebraska, has sent three or four times for vines, and has now but three or four little vines alive, out of dozens planted. The growth is very small. One or two men in Nebraska have been tolerably successful with it, their success being probably due to locality. On dry prairies and bluffs, it amounts to nothing.

SAUNDERS, of District of Columbia.—It can be grown wherever it can be sheltered and protected from mildew. All the best grape regions in this country are where there are no dews, and hence no radiation.

Wier, of Illinois.—The trouble with Iona, with me, is that it dies out in winter. If I could get it once well started, I have no doubt it would do well.

Hoyr, of Connecticut.—It is worthless with us; the roots freeze to death.

Wilder.—Langdon, of Alabama.—The Wilder succeeds with me, and I give it \*\* for Alabama.

ALLEN, of Virginia.—It rots badly with us about Richmond.

FLAGG, of Illinois.—It has failed in its foliage at Alton, so far as tried.

Wier, of Illinois.—It is only to be grown on special soils and special locations. It does well on my best soils.

Wylie, of South Carolina.—It does not do in South Carolina.

CAMPBELL, of Ohio.—Wilder has done very well with me, and I have received good specimens of it the present season from Richmond, Ind.

Herstine, of Pennsylvania.—It has given me the most satisfactory results of all the grapes I grow.

Quinn, of New Jersey—It is of no value with us.

Masters, of Nebraska.—Have not tried it sufficiently to determine its merits.

Campbell, of Ohio.—No. 5 is best in quality and hardiest in wood and foliage; No. 30 nearly as good; No. 1 rarely ripens with me—is not quite hardy.

Landbox, of Alabama.—Last two years have succeeded with several of Roger's grapes—such as Wilder, Barry and Merrimac: soil, light sand, with red clay subsoil.

Croton and Senasqua.—Wier, of Illinois.—These have been healthy in foliage and hardy in vine with me. The quality of Croton is very fine. Senasqua is a black grape of peculiar quality, but not rich: it is rather more healthy than Croton, but not so productive.

## DISCUSSION ON FIGS.

Brown Turkey received \*\* for Georgia, Florida and South Carolina.

Colonel Hardee says it stands transportation excellently—ten or fifteen days.

Black Ischia received \*\* for Florida and Georgia.

White Nerii received \*\* for Georgia, BERCKMANS pronouncing it the best of all the white figs.

Celestia received "for Georgia, South Carolina and Florida.

Brunswick received \*\* for Florida and Georgia.

Green Italian received " for Georgia and Florida.

Lemon received " for Georgia.

## POMEGRANATES.

The French Sweet, Large Sweet, Violet Fruited and Common Sour were named as succeeding in the South.

#### OLIVES.

Berckmans, of Georgia, says, are perfectly hardy in that State and, grow very fine fruit; also in South Carolina.

## ORANGES AND LEMONS.

The Mandarin and Northeast Blood are popular and profitable varieties of this fruit in Florida.

Colonel Hardee, of Florida, gave a very amusing and interesting account of groves of lemons which he had seen while in the Seminole war, the size of many hundreds being as large as a man's head. There were a great many varieties named by Colonel Hardee, but there was no other State which had a voice with the Colonel. The lime he also spoke of favorably, and said it was a source of revenue to his State.

#### ADJOURNMENT.

A motion to adjourn having been made by the Secretary, the President said that he could not put the question without saying just a word of the feelings which filled his heart at the great success of the meeting, as well as of the exhibition. There was no occasion, in his recollection of the sessions of the American Pomological Society, which had been more successful than the present one, and in bidding his friends good-bye, he hoped it would be his pleasure to greet each and every one of them again at the next session of the Society. He then declared the meeting adjourned until called together in Boston, at such time as the President may elect in 1873.

## GRAND BANQUET

OF THE

# HORTICULTURAL AND POMOLOGICAL SOCIETY,

OF VIRGINIA.

On Friday evening, September 8th, in accordance with a previous invitation, the members of the American Pomological Society were entertained in a sumptuous manner by the Horticultural Society, of Virginia, with a banquet, given in Assembly Hall. The attendance was large, and the best feeling prevailed.

The fruit having been removed from the tables, five of them were set out in the eastern half of the building, and upon them was spread a tempting array of substantials.

Captain John M. Allan presided at the principal table, being flanked by Hon. M. P. Wilder, of Boston, on the one side, and Mayor Keiley, of Richmond, on the other. The toasts were read by the Chairman, in the following order:

1st. The American Pomological Society: Marshaled by a Wilder, it has grown into a vigorous manhood. May its future years be as glorious as its past has been auspicious.

Colonel Wilder being called upon to respond, did so, in some pleasing remarks, highly complimentary to the citizens of Richmond, and full of kind words for Virginia and Virginians. He was frequently and loudly applauded.

2. The Virginia Horticultural and Pomological Society: May its labors cause our fair hills and valleys to blossom as the rose, with nature's own ornaments of clinging vines, and pendant boughs and beauteous flowers.

Mayor Keiley was called out by this sentiment, and made a capital after-dinner speech.

3. California: The modern or real Hesperides, whose orchards and vineyards, rooted in golden soil, bear a golden fruitage.

- Dr. J. S. Curtiss, of California, made an appropriate acknowledgment of this sentiment.
- 4. Pomologists: The benefactors of mankind. "By their fruits ye shall know them."

Judge Joel Parker, of Massachusetts, made a humorous response.

5. Our Fair Countrywomen: As dear as the apples of our eyes.

The response of Judge Schley, of Georgia, to this sentiment was gallant and poetic.

6. The premium fruit: Though it elicited peals of applause, it deserves to be succored.

Dr. Furnas, of Nebraska, spoke to this sentiment, and was loudly applauded.

7. The True Pomologist: His reputation can not be *impeached*, or his integrity *impaired*. When asked for his jewels, he proudly points to his nursery.

A good reply was made by Hon. W. C. Flagg, of Illinois.

8. Home Adornment: The first abode of man was decorated with fruits and flowers. May the precedent be forever followed to decorate and adorn our homes.

To this toast Mr. F. R. Elliott, of Ohio, Secretary of the American Pomological Society, eloquently responded.

9. The Wine Press and the Printing Press: The powers behind the throne greater than the throne itself. May enthroned reason never be dethroned by either, and may the deciduous juices of the one add vigor to the assiduous toils of the other, and both continue to verify the adage, *In vino veritus*.

Responded to by Colonel William S. Gilman, in his happiest vein.

## SPECIAL MENTION.

In closing our report, we would specially mention John M. Allan, the President of the Virginia Horticultural Society, to whose indefatigable labors and efforts were largely due much of the pleasure of the American Pomological Society's meeting; and we can assure Mr. Allan that he will ever be kindly remembered.

F. R. Elliott, Secretary.

# REPORTS

 $\mathbf{OF}$ 

# STATE FRUIT COMMITTEES AND INDIVIDUALS.

## REPORT OF DR. HOWSLEY ON NOMENCLATURE OF APPLES.

By reference to the record of proceedings in foregoing pages, it will be seen that Dr. Howsley was requested to make report, relative to his assertions and knowledge of origin and names of some varieties of apples. The Secretary reports that the Doctor sent him copies of the Western Gardener, and desired him to extract therefrom, as said report. The following is, therefore, given:

#### RAWLES GENET.

The various names by which this apple has been called, has caused no little confusion in pomological nomenclature.

As pomology is now approaching to something like scientific precision, it is important that every subject falling within its legitimate scope, should be stripped of everything which does not bear directly upon the point in question.

The various names by which many popular fruits are known, (especially the apple,) makes it imperative that the original and true name of every fruit should be known, and, when known, to be placed upon the national catalogue, and all State and local organizations be requested to conform thereto. Whenever the National Society shall feel satisfied, from the evidences produced, that they have any fruit under a wrong name, it would seem to be a duty obligatory upon them, to adopt the original and true name for the spurions; while the request heretofore made of State and local societies be still continued. The mere fact that a society, either national or local, has catalogued a fruit under a name of long standing, should not be held sufficient to keep the true and original name, when clearly ascertained, from being substituted therefor. Age should never so sanctify error, as to make it perpetual in preference to the truth. The truth should have precedence always.

In conformity with the above remarks, we propose now to discuss the proper name of the apple usually called Rawles' Janet. That this is not the proper spelling of the name of this apple, is to our mind quite clear, from the following reasons: The spelling of the word Janet is claimed to have originated in this way—that Mr. Rawles had a daughter whose name was Janet, and that, in honor of his daughter, he called the apple Janet. That this version of the matter cannot be true, is apparent from the fact that no English baptismal name can be found spelled in this way. It is derived neither from Jane, Jennie, nor Jenny. It is properly the name of a beast of burden, with which not many of us would like to be associated in name—we mean the female of the ass. In the second place, this derivation of the name cannot be true, because, in that event, the apple should be called Janet Rawles, and not Rawles' Janet. In the first it would be honoring her as his daughter, and in the second it would be degrading her as his servant. In the third place, no one ever has shown that Mr. Rawles had a family at all, and if he had, whether or not in that family, he had any children, and if he had children, whether among those children there were any daughters, and if any daughters, whether there was one called Janet. The whole of this seems to be a more assumption, wholly unsupported by any historical facts. In the fourth place, it is remarkably strange, that if the name of this apple was derived from a common English baptismal name, it should have become so corrupted as we now find it, as Genet, Ginet, Janet, Rawles' Janet, Geneton, Geneting and others, all being intended to refer to the supposed Miss Janet Rawles. We think that the derivation of the name as above given, is not likely to be adopted by any person making proper reflections on the subject of derivation.

R-a-w-l-e-s' G-e-n-e-t is the proper spelling of the name of this apple, and not J-a-n-e-t, as it is usually spelled. We derive the name of Rawles' Genet in the following manner: During the administration of General Washington, M. Genet was sent to the city of Washington, as minister of the government of France. Mr. Jefferson being at the same time Secretary of State for General Washington, was frequently thrown into the company of M. Genet, especially at their dinner parties. By this means Mr. Jefferson became acquainted with, and so admired this apple, which M. Genet had sent him from France, for his own use, that he, Jefferson, procured scions of this variety. He handed them over to Mr. Rawles, a nurseryman and fruit grower of Virginia, for propagation. Mr. Rawles grew trees from these scions, and introduced the fruit to the public under the name of Genet Apple. Scions of this apple were brought to Mercer County, Ky., in the year 1795, by a nurseryman named Edward Darneby, who commenced a nursery not far from Harrodsburg, and within a mile or two of a gentleman by the name of Ragan, the father of the late lamented Reuben Ragan, of Fillmore, Ind. When Mr. Darneby introduced it into Kentucky, the apple in question was called Genet, afterwards Ginet, and about the year 1810, it was called Geneton. Never, until after 1810, was it called Rawles' Janet, and not until after this time was the last half of the name commenced with Ja instead of Ge. Within our own recollection this apple was, in the vicinity of Lexington, Ky., called by the name of Jefferson Pippin, thus showing the connection of Mr. Jefferson with the introduction of this apple to public notice. Many of the foregoing facts are within our own knowledge, others we obtained from Mr. Ragan during his life time, and the balance of the late Dr. Thompson, who was born and raised near Lexington, Ky., to whom we are indebted for many of the facts in regard to the history of this fine apple. We, therefore, conclude that from the part which Mr. Rawles performed in introducing this apple to the fruit growers of

the Southwest, that it is highly appropriate to prefix his name to the apple, and spell it properly, R-a-w-l-e-s' G-e-n-e-t.

#### McAFEE'S NONESUCH.

By consulting Collin's History of Kentucky, pages 452 to 454, it will be found that a colony from Virginia, consisting of tive brothers of the name of McAfee, together with other persons, came to Kentucky in the year 1779. These colonists erected a fort or station on the banks of Salt River, about five miles below Harrodsburg, the county seat of Mercer County. The McAfee portion of the colony, after clearing some land, planted peach pits, and also sowed apple seeds. From the apple seeds thus sown, sprang the tree which produced the apple now under consideration. They planted orchards from the seedlings thus raised, but the tree bearing the apple in question stood in the orchard of George McAfee, the oldest of the five brothers. Col. John McAfee is the grandson, and now lives on the old homestead of George McAice, who planted and fruited the tree which produced the original McAice's Nonesuch. He says, in his letters to us of 7th of July, 1869, and 13th of February, 1870, that the tree which stood in his grandfather's orchard and producing this apple, was a seedling and not a graft. He also well recollects the old tree, and can point to within a few feet of the place where it stood. The apple was first called Nonesuch. After it commenced to spread through the country, the name of McAfee was prefixed, and that, from that time until now, it has been known and called by no other name than McAfee's Nonesuch.

The Rev. R. L. McAfee, of Columbia, Mo., in his letters to us, bearing date respectively 19th of August, 1869, and 13th of February, 1870, makes, in substance, the same statements.

He says, further, that its migration to Missouri was in this wise: His father, James McAfee, removed from Kentucky to Missouri some time previous to the year 1828; in which year he, at his father's request, sent to him scions taken from trees known to him to have been grafted from the original tree, and that he is now living on the farm where his father originally inserted these grafts; that he is now about seventy years of age, and has known this apple as the McAfee's Nonesuch from his earliest recoffection; that all the apples of this variety in the surrounding portions of Missouri, are believed to have originated from his orchard, either directly or indirectly.

Dr. G. L. McAfee now lives on the farm, in Hardin County, Ky., which was owned by us up to 1856. On this farm we first planted trees bearing the fruit above named. The trees we planted, however, were labeled Winter Pearmain.

The Doctor, in his letter to us, bearing date 26th of January, 1870, says when he saw the fruit on the trees labeled Winter Pearmain, he at once recognized his old favorite Nonesuch, which he had known from his childhood—even as far back as he could recollect any apple, which was now more than fifty years. During all of his acquaintance with this apple, it was known and called by no other name than McAfee's Nonesuch.

Having spoken at sufficient length of the origin of the McAfce's Nonesuch, and also of the time and manner of its introduction into Boone County, Mo., we will now speak of its introduction into Indiana and into Southwestern Missouri. In the year 1823, the late Reuben Ragan, of Fillmore, Ind., removed from Mercer County, Ky., to Putnam County, Ind. He took with him scions of this variety, raising from them both nursery and orchard trees. From his nursery and orchard, this apple was widely diffused through the adjoining portions of that State, and was known by no other name than McAfee's Nonesuch. John N. Buford, a few years after, removed from Mercer County, Ky., to Park County, Ind.,

taking with him scions from the original tree, standing at McAfee's Station, near Harrodsburg. Mr. Buford furnished Mr. Ragan with some of these same scions, so that the grafts now in the hands of Buford and Ragan were from the original tree. Subsequently to this, Mr. Buford removed to Independence, Mo., and by this means introduced the apple into Jackson County. Through Mr. Buford and Mr. Ragan, it was also introduced into Cass County, near Harrisonville, and also in the vicinity of Lone Jack. Through these early introductions, this apple has been widely diffused, in its westward march, through Indiana and Missouri. Through all its migrations from these sources, it has uniformly been known as the McAfee's Nonesuch.

We will now speak of the manner in which it has obtained such a multitude of names, as the following: McAfee's Red, Large Striped Pearmain, Winter Pearmain, Zeeke, Storr's Wine, Valandingham, White Crow, Missouri Superior, New Missouri, Hubardston Nonesuch, Gray's Keeper, Park's Keeper, Park, etc.

And first, of the McAfee's Red, we suppose this name was given from the simple fact that it is a red apple, and being shorter and more easily called than McAfee's Nonesuch, the former was adopted in preference to the latter. We have heard of it being called by this name in but few places, and Quincy, Illinois, in the nursery of Hargis & Snmer, is one of them.

2. Large Striped Pearmain. This name was, to our own knowledge, given by Col. James Allen, of Holly Spring Nursery, Nelson County, Ky. He originated the name but not the tree. He cultivated it first under the name of Winter Pearmain. Z. R. Huggins, of the Glasgow Nursery, Ky., got it at the same time we did, of Col. Allen, under the above name, in the year 1838 or 1840. Mr. Huggins, in his catalogue of the current year, still calls it Winter Pearmain. A. D. Webb, of Bowling Green, Ky., who got his stock, either directly or indirectly, of us, catalogues it Winter Pearmain. Miner, who many years ago ran a nursery at Clarksville, Tenn., got it of Col. Allen under the name of Large Striped Winter Pearmain. J. S. Downer, of Fairview, Ky., got scions from Miner, under the above name, as now appears in his catalogue. Elliott, in the edition of his Fruit Grower's Guide for 1845, calls it Striped Pearmain. Downing, in 1858, calls it Large Striped Pearmain. Elliott leaves off the words "large" and "winter," and Downing adds them both, while Warder adds the word "large," and leaves off "winter." At least two of them are wrong. We hold that all are wrong. No one can, we assert, trace any of these names to any other source than to Col. Allen. He never claimed to have originated the tree, but to have got it of John Lightfoot, who died more than twenty years before Col. Allen retired from public life and commenced his nursery. He, we feel quite certain, never saw the original McAfee's Nonesuch tree. He was more than tifty years of age before he turned his attention to the cultivation of a fruit nursery, and was, consequently, not well posted upon fruit nomenclature.

None of the above names can be traced farther back than 1838, while that of the McAfee's Nonesuch is traced, with certainty, to the close of the last, or the beginning of the present, century. We will prove, hereafter, that these apples are identical. When we do this, we think that all other names than the McAfee's Nonesuch should at once be expunged from every catalogue in the land, whether national or local.

3. The name Hubardston Nonesuch, is shown to be incorrect by a comparison of the two apples, each name being correctly applied to two distinct fruits.

4. Zeeke. This name is derived from an old man, we believe, from Madison County, Ky., who was familiarly called by his friends Uncle Zeeke. Uncle Zeeke gave the scions, which he brought from Kentucky, to a man in Clay County, Mo., by the name of Williams, from whom Mr. Todd, who many years ago had a nursery near Liberty, Mo., got scions. From Todd's nursery, the Wyandotte Indians got their trees of this variety in 1847. Thus we have it introduced into Todd's nursery in Northwest Missouri, at an early day, from which it has been widely disseminated among the Indians west of and near the Missouri River. Hence it has, for want of knowing the true name, acquired the various local names of Storrs' Wine, from Rev. Mr. Storrs; White Crow, from Jacob White Crow, a half-breed Indian; Gray's Keeper, from Alfred Gray; all of whom are at Quindaro, Kansas. In Missouri, it has obtained the names of New Missouri, Missouri Superior, Valandingham's Wine, Park's Keeper and Park. The two fast from Col. Parke, of Parkville, Mo.

We unhesitatingly pronounce the apple known by all these names, as identical with, and none other than the McAfee's Nonesuch. For proof of this, we refer to the records of the Kansas State Horticultural Society, at its annual session, in December last, at the city of Ottowa:

At request of Dr. Howsley, a committee of five was appointed to establish the nomenclature of the McAfee's Nonesuch, with powers to send for persons and papers.

Committee—Dr. Jno. A. Warder, of Ohio; G. C. Brackett, of Lawrence; Dr. J. Sfayman, Leaven worth; S. T. Kelsey, Ottawa, Franklin County; Loyal Bishop, Jackson, Linn County.

Committee reported McAfee's Nonesuch, Large Striped Pearmain, Nonesuch, Zeeke, Missouri Superior, Gray's Keeper, Storr's Wine, Valandingham, New Missouri, White Crow, Hubardston Nonesuch, Park's Keeper, as one and the same apple.

G. C. Brackett, Secretary.

## THE FALL QUEEN APPLE.

Synonyms—Queen, Winter Queen, Byer's Red, Buckingham, Frankfort Queen, Kentucky Queen, Lexington Queen, Ladies' Favorite, Blackburn, Henshaw, Equinelly, etc., etc.

In the year 1795, a man by the name of Edward Darnaby, came from Virginia to Mercer County, Kentucky, and planted a nursery some five or six miles from Harrodsburg, and within a few miles of the place where the father of the late Renben Ragan afterwards settled. He brought with him, among others, grafts of the following varieties of apples, viz.: Genet, Pryor's Red, Hughes' Crabb, Cannon Pearmain, and Queen. The Queen has been known from 1795 to the present time, in Kentucky, by this name, having, as most fine apples have done, acquired the various local names as above.

It made its way, not long after Mr. Darnaby brought it to Kentucky, from Buckingham County, Virginia, to Sierry County, North Carolina, by immigrants from the former, to the latter place. When the trees in North Carolina came into bearing, the people there, as in Kentucky, for want of not knowing its true name, called it Buckingham, from the county in Virginia from which the grafts were taken. It has made its way from Virginia through Kentucky into Indiana and Missouri, under the name of Queen, and from the same point through North Carolina into Tennessee; thence into Southern and Central Illinois, under the name of Buckingham.

Dr. Warder, in his late work on Pomology, has described the Queen and Buckingham as distinct varieties. We apprehend that this error on the part of those first calling it Buckingham, has originated in a want of comparing the trees together, as well as a want of comparing the fruits thoroughly, or they never could have made so palpable a mistake. We have the trees of the Buckingham and Queen growing side by side, and cannot possibly detect any difference in the growth and habit of the trees. There are peculiarities common to both, which could not happen in one of ten thousand cases, if they were distinct. The leaves are precisely alike, both in their physical conformation and in their peculiar deep green color. The singular manular protuberances, which are frequently found on the body and larger branches of the one, are also found on the other. The roots of both ramify from the body, very near the surface of the ground; so much so, that both are frequently reproduced from the sprouts that spring up around the tree. Another striking peculiarity. which I do not remember to have observed in any other, is that root grafted. They send out roots from the first bud below the surface like a grape cutting, frequently leaving a naked space from the top bud down to the bud next above its junction with the stock upon which it is grafted.

Moreover, the size, the color, the shape and the time in which the fruit is in eating condition, are the same. Added to all this, the core and the seeds, where taken from specimens of the same maturity, are the same, as also the flesh of each is of the same color, texture and flavor.

One of the most fruitful sources of error, in Pomological nomenclature, is that single specimens can be taken from the same tree, or from the same branch of the tree, as dissimilar in appearance as if they were really of different varieties. It is only when grouped in masses, that they unmistakably show their true, distinct character.

External examinations of apples are the most unreliable of any other that can be instituted; for there is scarcely a single variety that does not vary in many of its outward features, such as in the basin, the calyx, the cavity and the stem. So that very little reliance (for determining the true variety,) can be placed in any one, or all of these. We know of no single trait which is constant and unvarying in but very few apples.

It is only where a group of points, all concentrating in a well known variety, are considered, and they added to some well known or almost invariable characteristic, that the best of judges can decide, with any degree of certainty, as to the true variety of specimens under consideration. A mere passing outside examination of an apple is not sufficient to form a correct judgment, unless it be by some one who has been long and intimately acquainted with the variety to be passed upon. An appeal to the books, in a case of this kind, is next to nothing.\*

It is in consequence of not having any tixed rules in Pomological usage for determining the variety of a specimen presented for naming, that so many old and line varieties find their way into the books and catalogues of the present day, under new names. This is an intolerable evil, and grievous to be borne. Publishers of books, and conductors of Horticultural journals, should guard this point with sleepless vigilance, and suffer nothing to go to the

<sup>\*</sup> The Secretary of the American Pomological Society would like to remark that just here comes in the fact of so much of incorrect nomenclature, viz.: it is from the egotistical ideas of knowledge assumed by men who have had but a half dozen or so of years acquaintance with a fruit, and are void of any knowledge of it outside of their own immediate locality.

world with the authority of their names, as new, that can not be satisfactorily traced to its origin.\*

We have used, in the heading of this article, the name of Fall Queen, instead of Queen, the name under which it was first introduced from Virginia to Kentucky, by Mr. Darnaby, as being necessary to distinguish it from another and distinct fruit, called the Summer Queen. The prefix of Fall therefore, becomes quite appropriate, as it is in use in the fall and early winter.

## REPORT FROM ARKANSAS.

ROCKY COMFORT, LITTLE RIVER Co., ARK., May 10th, 1871.

Mr. F. R. Elliott:

Dear Sir: I received your favor, in reply to my letter making inquiries and asking for information, which you kindly responded to, and wishing me to send you some information in relation to fruits in my section of country. We know but very little about fruits here ourselves, as a general thing, there being but one nursery in the county worthy of the name, and no other, I suppose, for more than a hundred miles. The attention of our people heretofore not being interested in fruits, we have mostly to begin anew. And I think it would be more becoming in us to receive information, than try to impart it to others, under such circumstances. I will say, that it will always be a pleasure to me to do anything of this kind, if in my power. I am not judge enough of fruits to tell many of the different kinds by inspection, nor could I, at this time, describe an apple, so as to be relied on. We have some fine fruits in Southern Arkansas; and I think we can raise as good fruit here as north of the Boston range of mountains, which is so celebrated for fine apples. Peaches do well here; it appears to be their natural home. Ours are most all seedlings, very few budded and improved kinds of peaches.

Cherries, but few trees carelessly managed; don't appear to bear well.

Chickasaw plums bear and do well generally. I am not acquainted with any other variety.

Pears grow and bear finely. My trees are too young to know what kinds do well; I only have a few kinds.

I can't get off well with figs nor quinces, as yet; perhaps I have not good kinds.

Limber Twig apple does finely for winter. Horse apple, for summer, is the best I know of. We have an apple we call the Black Twig here. I have been told it is what you describe and figure in your Western Fruit Book, and Dr. Warder, in American

<sup>\*</sup>The Secretary would here remark that conductors of journals and publishers of books are utterly ignorant of varieties of fruits, or plants. It is their business to publish and sell, and look to returns on the credit of the writers who supply their matter, and it has become too noted, in all of our journals, to longer be questioned, viz.: that if a journalist can obtain matter, free of cost, his position, simply as publisher, trees him of any responsibility, and hence it is that the record of a man of one year's knowledge and acquaintance of a fruit, or principle, is valued or recorded equal with him who has devoted a life to the subject.

Pomology, as the Winesap. If that is the apple we call Black Twig, as I grow the apple in my orchard, your description is generally correct, except the description on quality of the flesh; you say in your book, "flesh yellowish, juicy, tender, sub-acid, sprightly." Here, with us, the flesh is rather firm than tender; with that exception, the description all suits for the Winesap, or Black Twig, as we have it. It is the prince of apples. My trees are just coming into bearing. We have another fine apple, if it grows well here, an apple we call the Shannon Pippin—you describe as Ohio Pippin—not thoroughly tried here; so far bids fair to be one of our leading fruits.

My orchard is not large nor well arranged. I intend to make fruits part of my business, and I hope, in a few years, to add much in the way of different kinds of fruits. I have, heretofore, neglected to label and map off my grounds, both of which I shall do in the future; so I will be able to speak confidently about what I have, which I can't do now in regard to all my trees.

I have no railroad nor other facilities for getting trees, only through the mail; so have to grope along slowly. If we could get scions through the mail that could be grafted here and grow, I would like to try many kinds I see figured and described in the Department of Agriculture for several years past; and some I would like to try, I see described in Judd's Annual.

I am not a man of wealth; shall have to move slowly, so as to go sure. I expect to raise fruit mostly for stock, there being no market near me more profitable, which will not require a great many kinds. But I am not satisfied not to try new kinds; it don't cost much, and the satisfaction more than pays the trouble.

I am, very truly, yours,

Chas. A. Strawn.

N. B. Below are the names of some apples that do well with us here (Southwestern Arkansas): Red June, Early Strawberry, Summer Queen, Equinetelee, Carolina Greening, Bradford's Best, Hew's Crab, English Crab, Yates, Kentucky Red, Stevenson's Winter, Hall. My trees not fruited yet; but I speak from good authority. The above apples are all raised in this county.

C. A. S.

## REPORT FROM CALIFORNIA.

4.0.

Alhambra, August 12th, 1871.

# F. R. Elliott, Esq.:

Dear Sir: In response to your kind invitation, I have the honor to submit to the American Pomological Society, my observations upon California products.

Numerous books and innumerable newspaper articles have, from time to time, heralded to the world the wonderful resources of California; the prolific and mammoth growth of its forest trees, gigantic pumpkins, hefty pears and luscious grapes; so that but little more on that score remains to be said. Otherwise, it is of the utmost interest

to every terraculturist, repeatedly to dwell upon the conditions favorable to the development of those products; to unravel the mooted points regarding the culture of our fruits, and decide upon their adaptability to different sections of the country; and, finally, to relate, compare and compile the individual efforts and experiences.

Favored by a most genial climate, and a virgin soil, rich in all the elements of plant food, the first seeds here given to the earth grew up luxuriantly, amply rewarding the labor of the culturist. Still, at the threshold of our efforts, we were controverted by the advocates of deep and of shallow ploughing, or even trenching, as a preliminary operation to planting. The conviction here appears to be settled, that a deep, mellow and friable soil will do with less ploughing, but heavy, adhesive clays cannot be worked too much: provided the soil is well stirred, but not turned over to a great depth, nor left too flaky, but well pulverized and compressed. In this, during six months, rainless climate, if the soil is well pulverized, corn, beans and many vegetables are raised successfully without a drop of water, and fruit trees develop thriftily. Some ascribe this to capillary attraction of moisture from the bowels of the earth, others, with better reason, to the known processes of condensation. With twenty inches of yearly rainfall favorably distributed, all grain and fruits yield abundant crops. Still, judicious irrigation would enable us to grow perpetual crops during the year; and also, if applied early in the season, improve the size and juiciness of our fruits, without deteriorating their keeping qualities. Newly transplanted trees can gain, by irrigation, in one, the growth of three seasons.

Irrigation, so well understood by the ancients, but neglected under the barbarism of the middle ages, begins to receive that attention commensurate to its importance for California. To prevent and repair waste, is an uncontroverted axiom in agriculture; still there is but little done with us, to utilize the most valuable part of our surface soil, or prevent its being carried off by heavy rains and overflows. Millions of acres of the richest soil, now lying barren, or with only scanty vegetation, are waiting for the vivifying flow over their surface of the superabundant waters of the Sacramento and San Joaquin rivers and their tributaries, to fill the granaries of the world; and the overflowed or tule land, at the conjunction of those rivers, if reclaimed, would surpass, in abundance and variety of products, the famous delta of the Nile. The work of reclaiming those tule lands is prosecuted most energetically; and the facility of its accomplishment, and the success already achieved in raising bounteous and luxuriant crops, surpasses the most hopeful anticipations. Their value is enhanced by the locality being exempt from miasmatic diseases. They are subject to public entry at one dollar and a quarter per acre, and the proceeds are disbursed for their reclamation. Here are homes for the asking, in the future Holland of the Pacific, the most valuable, the most highly to be prized land in California.

The tap root was another source of botheration, until by digging, observing and comparing; following up several roots through many yards of gopher holes, some by a circuitous route of over forty feet into a well, and others about the cellar, I concluded

that it was wicked to curtail that appendage—it was opposing the instinct of nature by a contracted spirit; besides, it was fighting a shadow; all the trees I ever bought had a superabundance of top, but scanty tap.

In my first efforts at horticulture, I was forcibly impressed, while contemplating the promising fruit-buds on my yearling peach trees, that to secure peaches for next season, I certainly should not whittle up my darlings into fashionable standards; so I contented myself with pinching off the ends of the shoots, and have invariably followed that practice since with profit; though often mortified by the remark of Eastern visitors, that the "trees looked unnatural." Low-branched fruit trees shade the ground, protect the stem from injury and sun-scald, and reduce the expense of pruning and gathering fruit fully fifty per cent.

Our protracted dry season, bright skies and high temperature, are favorable to the development of fruit buds; hence our fruit trees are weakened in their physique by overbearing; and if to this is added insufficient moisture, close planting and neglect in pruning, they soon fail. The advice holds good, to follow the renovating system of pruning, by shortening in the branches, thinning out the fruit, clean culture and shading the trunk. There is a needless apprehension with some, that covering the stems of fruit trees with a composition of clay, lime and ashes, which is otherwise very serviceable to protect the stem from manifold injuries, would obstruct the pores of the bark, to which they ascribe the office of lungs. Having had occasion to apply such a mixture, some seven years ago, I observe the good effects of that application to this day; the painted bark of those trees is perfectly smooth and healthy looking, while the bark above has a dull appearance, and is covered more or less with moss; the line of demarkation is very distinct. There is considerable difference here in the season of the ripening of many varieties of fruit; some late winter varieties getting mellow in the fall; but it depends entirely on the location, influenced by the aspect of the ground, dryness of the soil and the temperature, and is not general; hence our markets are supplied, for many months, with a given variety of fruit in all stages of ripeness. From the same cause, there is also a great difference—undoubtedly, more than in other countries—in the flavor, size and coloring of California fruits.

Our pioneers in horticulture, formerly strangers to that vocation, tried to surpass each other in possessing the greatest number of varieties; and it is to be regretted that, in very many instances, they were imposed upon by unscrupulous nurserymen, with long catalogues of so-called choice varieties, which mainly proved perfectly worthless; and the products of those trees now encumber our market with unsaleable and inferior fruits.

It would be desirable, if there could be the same spirit enlisted in the effort of renovating and infusing new blood in the few really choice and desirable varieties, that is now devoted to producing new ones from seed. The effort would be as alluring in its results, and require fully as much attention, care and judicious discrimination, besides affording far more profitable returns. It would necessitate the careful selection

of well developed seeds from thrifty seedling trees, if possible, to raise stocks, and the selecting of scions from perfectly healthy young trees bearing a number one fruit, and in every way of normal condition.

Our fruit trees are as yet measurably exempt from disease and depredations of insects, but those pests begin to multiply, and soon will be as annoying as in the older cultivated sections of the country.

But California can claim pre-eminence in the culture of the vine. The choicest foreign varieties, either adapted for the table or for wine, thrive to perfection, and it is only a matter of time to render superfluous the importation of raisins and wines. It is not to be expected that a new industry, requiring very nice and careful manipulation, considerable accumulated capital, and many provisions and appliances which in other countries took many generations to establish, can have arrived at perfection within the one decade past. But there is no exaggeration in proclaiming, that here are lying idle innumerable most choice spots, in every way favorably adapted for viniculture, waiting for the first comer to appropriate his share as a free gift from the nation. Those future vineyards can be selected according to whim or knowledge, in every desirable aspect, altitude, underlaying strata of decomposed volcanic or aqueous detritus; with any desirable predominance, either of silicious or calcareous formations; and with equally great modifications in climate and other meteorological conditions. The vine, once rooted, delights in the ardent rays of the sun; no drought checks its growth; no vicissitudes of season destroy the vigneron's hope in California. No exhausting labor exacts his every moment of existence, for carrying on his back the little earth he can scrape between rocks and cliffs, to nourish his vine; nor needs he to toil through many unpropitions seasons, to obtain now and then a fair crop. The fig, the olive, pomegranate, the citron family, the tea and coffee, and even the tropical palm and banana, are ready to fill his lap with golden fruit—a most worthy prize for exertion. The more modest mulberry is destined to exceed them all in value, with the silken threads soon to be spun in so many prosperous households. Nut bearing trees of many varieties, and the nourishing chestnut are ready as so many substitutes for bread. Even the cork oak takes delight to float us over many difficulties, and assist in all good offices towards the vigneron.

J. Strentzel.

## REPORT FROM GEORGIA.

August 7th, 1871.

F. R. Elliott, Esq.,

Secretary of the American Pomological Society:

DEAR SIR: The peach crop throughout the Southern States has been uncommonly large, and remarkable by the absence of defective fruit among our early varieties. Usually the first ripening specimens are attacked by the curculio, and unfit for use. This

year, the first defective peaches were apparent only when the extra early varieties had matured. We first attributed the absence of the usual depredation of the curculio to the extreme cold weather of last winter, which might possibly have destroyed the larvie of the insect; but as we soon found the usual amount of affected fruit among the varieties maturing end of June, it was evident that the supposition was incorrect. Hale's Early, Tillotson, Troth's Early, Haines' Early Red, Fleitas St. John, all maturing between the 1st and 25th of June, were entirely free from worms. As these varieties bloomed at the same time as those maturing at a later period, the fruit was as much liable to being attacked by the curculio as the others. Still the entire freeness of this defect was general through the State, and only as far as these varieties.

This season has enabled the Hales to be fully tested here. A great diversity of opinion exists as far as its adaptation for shipping; in the main, those that have fully tested it, coincide in a favorable opinion. If gathered when it has attained full size, and just at the point when it begins to assume the ripening color, it will stand shipping as far as any peach can be sent. It has been condemned in a few localities, owing to its predisposition to decay. Except these exceptional unfavorable reports, it is conceded by fruit growers to be the best very early variety introduced. Its period of maturity commenced in the middle section of the South, June 1st, and it continued to mature gradually until the 15th. During this time, rains were of almost daily occurrence, still there was no decay visible in that section.

Among the new varieties, of late introduction, Mr. Rivers' seedlings are very promising, but not sufficiently tested to report upon. The Fleitas St. John, which is doubtless the original name of the May Beauty, of Louisiana, has been satisfactorily tested, and admitted among our best very early varieties. The fruit resembles the Early Crawford in appearance, but with deeper colored skin, and matures with Early Tillotson, or fully three weeks before the former. Mountain Rose follows Early Tillotson, and is an improvement upon the large Early York. It is superior in quality. Many new varieties have appeared, whose period of maturity takes place during July, when this fruit is in its greatest abundance; hence they are not as valuable as those that mature at the beginning of the season. Of late varieties, the Picquets Late, as a substitute for Smock, is unsurpassed.

Apples produced a moderate crop. Few new varieties, of merit, have appeared.

Pear trees have suffered from blight to an alarming extent. Few varieties are exempt from this scourge; the Duchesse de Angouleme being the only variety which has never been affected. Trees are not often affected until they commence to bear fruit, and when a branch is diseased it is nearly always that which produces fruit, leaving the others comparatively free from contamination. I have, of late years, gradually lost many trees, which were first affected upon such portion as produced fruit, each succeeding year destroying the fruitful branches, until now scarcely the stump remains alive. If, by chance, a branch is without fruit, it will be often found in a most luxuriant growing condition. This singular fact should be carefully investigated, as it may,

perchance, lead to the true cause of the disease, and, consequently, to the discovery of a remedy. The pear crop has been very large in the past four years, there being no intermission of good yield in that time. Our best crops have been produced where trees have received but ordinary care. Under the most favorable circumstances, such as clean culture and heavy fertilizing, the blight was most disastrous in its effects.

#### PLUMS.

We have now several improved varieties of the Chickasaw type, which are very productive, and this season have been entirely free from curculio. Although these varieties are inferior in quality to the finer varieties, such as the Gages, Washington, etc., their quality is of a sufficiently fair standard to be admitted among our good fruits. The earliest good variety is Caradeuc; fruit of medium size; round; yellow, with brown red cheek; flesh melting, sweet and vinous, slightly adhering to the stone; ripens end of May. This variety shows hybrid characteristics. Next is the Wild Goose, a large, bright red fruit, a basket of which is an attraction to customers to any fruit dealer's stall. We end the season with Mountain and Newman's, both improved Chickasaws; the latter ripens from middle of July to middle of Angust, and is an extraordinary prolific variety. This is only a beginning of the introduction of a new race of plums, upon which the curculio seem to have no destructive power. Several new varieties of this class have lately been produced in Alabama, but specimens sent were decayed on arrival, and prevented me from giving a full report.

The Grape crop has generally been very small; even in our cities, where this crop is always abundant, the smallness of this year's yield being a matter of surprise. The Catawba seems to regain its former state of health, and many vines that had not produced sound fruit during a number of years, and entirely neglected as to culture, have this year produced sound fruit. On the other hand, Concord has decayed badly, in nearly every section of the State.

The Ives has now been sufficiently tested to class it among our standard varieties. Ripening with Hartford Prolific, it colors more evenly, produces larger bunches, keeps the berries well on the stems, and is a most vigorous grower, and prolific bearer. No decay has, so far, affected this variety. It is a source of regret, as well as surprise, that of our Southern varieties, which formerly ranked foremost as to quality and fertility, we have scarely any left which are free from decay.

The Warren, or Herbemont, has nearly been abandoned, owing to its regular failure, from decay. Jacques, or Ohio Lenoir, and Long, are similarly, though somewhat less, affected. Pauline has stopped bearing fruit. Strong growing vines have, of late years, failed to show any sign of fruit. These failures would indicate that grapes, like many other fruits, have but a limited period of existence; that after a few years of fertility they degenerate in vigor, and need replacing by newer and strongly constituted varieties. The theory advanced by many grape growers, that continual renewal of the vines is necessary as a preventive of rot, is gaining ground here. We can not expect more than

three or four sound crops of grapes from our vines when planted in open field. After that they do not pay to retain. In cities, or where vines are trained upon buildings, this defect is not so apparent. Close pruning has helped this state of degeneracy in vigor. The drawbacks experienced by grape growers, by the decay in grapes, have been so numerous that many have become discouraged; and this would eventually have arrested this branch of culture, was it not for the Scuppernong, and other varieties of the type, Rotundifolia, which never have yet failed to repay for its culture. To this type we must look for the future of wine growing here. Many improved varieties are cultivated; others will soon follow, until we may reasonably expect a list of varieties, differing in their color and taste, to enable the production of different classes of wines. There is improvement needed to make the Scuppernong perfect as a wine grape; as it is, however, its value for our section can not be too highly estimated.

The Strawberry culture has increased with great rapidity. Our markets are now supplied in great abundance, where a few years past this fruit was scarcely ever seen. Still with the large amounts daily brought for sale, as a rule, good prices have been obtained for good fruit, which will tend to a further increase of this fruit. Good fruit, well cared for, has never failed to produce a paying price, not with standing the quantity in market seemed above the demand. Our seaports of Carolina and Georgia have inaugurated a large trade with Northern cities in the supply of early strawberries. Increased facilities in shipping are expected for next season, when immense quantities of this fruit will be grown for that purpose.

Although not strictly classed among our fruits, the melon has, by common consent, been admitted among them; and as the culture of the water-melon, in the vicinity of Augusta, has assumed immense proportions, this branch of culture is worthy of some attention. Shipping water-melons to New York is a new branch of trade, inaugurated here within the past few years, and is one that is increasing rapidly in extent. We have here a section of country that seems admirably adapted to their production, and such is their quality that Augusta melons are considered as the superior class of that fruit in New York market. For shipping, the Rattlesnake melon is usually grown. It grows of uniform large size; is always of superior quality, and remains fresh for a long time after being gathered.

In conclusion, I am happy to say that great improvements have taken place in our methods of fruit culture; increased attention is paid to our native fruits, and their amelioration; Pomological societies are being established, and fruit culture is now recognized as one of our most important branches of husbandry.

Very respectfully,

P. J. Berckmans,

Chairman State Fruit Committee.

#### REPORT FROM ILLINOIS.

## F. R. Elliott,

Secretary American Pomological Society:

DEAR SIR: I herewith give some notes of my experience with, and observation of, varieties of fruits on the white soil of Southern Illinois, latitude thirty-nine degrees, nine miles from the Mississippi.

APPLES.

American Summer Pearmain.—Desirable for family use, but not sufficiently productive nor highly colored to be profitable for market. Trees thirteen years planted.

Astrachan Red.—Thirteen years planted. Not productive, and more marked and disfigured by insects than any other varieties. Fruit large and high colored. Tree very healthy.

Autumnal Sweet.—Nine years planted. Tree healthy; not productive. Fruit very good.

Belmont.—Nine years planted. Productive and good, but rather small, and here an autumn apple.

Belleffen Yellow.—Trees of various ages not productive, as a general rule.

Benoni.—Eight and nine years planted. Inclined to blight on rich land. Overbears. Too small, perhaps, for market, but very good in quality.

Ben Davis.—Trees eight years planted. A good tree and productive; the fruit of good size and highly colored, but rather more subject to insect depredations than others, and barely good in quality.

Blue Pearmain.—I have not fruited; but it is condemned as poor by those who have.

Bohannan.—Trees six years planted. Bore very handsome and good fruit, of above medium size, this season. I am favorably impressed with it.

Bonum.—I consider this, all things considered, the most promising Southern variety I have yet fruited. Tree six years planted.

Carolina Red June.—Trees twenty-nine, thirteen and eight years planted. This variety has been discarded by some growers for "scabbing;" but it succeeded well in 1870 and 1871, and, with high culture, will, no doubt, give farther good returns.

Chenango Strawberry, I have not had in bearing, but I have good accounts of it from a neighbor. It is one of our most beautiful summer fruits.

Cooper.—Twenty-eight years planted. Although unshapely and cankered, has borne some nice fruit. It is a September apple here, although I have seen it as a winter variety from Northern Illinois.

Cogswell.—Nine years planted. Shows a barely good tree, but productive of a good and handsome apple. It may be worth extending the cultivation of farther north.

Coles' Quince.—Nine years planted. A vigorous, heavy foliaged tree, and productive. Fruit large, coarse and misshapen. Will not be desirable here, I think.

Dominie.—Trees nine years planted; are among the most regular and strong growers. The fruit is out of shape, and drops prematurely. I don't think it will do here.

Drap d'Or.—Trees nine years planted. Tree good. Fruit not fair, but very good to best in quality.

Duchess of Oldenburg.—Trees nine years planted; are of slow growth, partly in consequence of great bearing. The fruit drops prematurely, and, whether ripe or not, is of too fearful an acidity to be tolerable where better varieties can be grown.

Early Harvest.—This variety ripened this year a week earlier than ever before, and ten days in advance of its average season. The tree is not entirely healthy in my older orchard; but I think this may arise from climbing into them to pick the fruit, when the bark is easily injured, as it is when we gather them. This variety has some faults of "scabbing" and unproductiveness, but we must keep it until we can do better.

Early Pennock.—Nine years planted. Has good trees, and, this season and last, has borne some good crops of large, handsome apples, of good quality. I am favorably impressed with it as a market apple.

Early Strawberry.—Twenty-eight years planted. This variety, if I have it right, is desirable. The tree is vigorous, and the fruit abundant, fair and good for market or home use.

Fallawater.—Tree a strong, healthy and rapid grower, and bearing well; but the fruit, though large, is almost without a tinge of red, though I have seen it in Michigan pretty highly colored. Trees thirteen years planted; begin to look old. I doubt whether this variety will pay.

Full Pippin.—Nine years planted. Strong, healthy trees. No fruit to speak of, as yet.

Fall Wine.—Trees thirteen years planted. Tree proved tender with high cultivation, and "bark burst" in several cases in 1863. Rather productive; and the fruit one of the most exquisitely flavored varieties that I am acquainted with.

Fameuse.—Nine years planted. Tree healthy, but the fruit rots badly, though abundant and good. I think it cannot resist insect attacks as well as some other varieties.

Fulton.—Trees nine years planted; bore their first good crop this year. This is evidently a seedling of the Rambo, resembling it in tree and fruit.

Gilpin.—Trees are short lived, and the planting of 1822 gone long ago. This is considered a profitable variety, but my experience has not proved it. It keeps well, and sells when there is nothing better, and makes good eider. I plant it under protest.

Grimes' Golden Pippin.—Trees seven years planted. Is very vigorous, and bore a single fair seeming specimen of fruit this year.

Hawthornden.—Trees nine years planted; are dwarfed with heavy bearing, and look the worse for wear. They commenced bearing in 1865, and have borne, I think, seven consecutive crops, generally heavy, of large, fair apples. I think it will prove quite valuable for cooking and market. The productiveness of this variety, and its dwarfing effect upon the tree, reminds one of the Oregon experience, all varieties there being dwarfed by overbearing.

Hewes' Virginia Crab, has just begun to bear fruit with me, but is in full bearing on old trees some miles away, and succeeding admirably.

High-Top Sweet.—Trees eight years planted; began to bear this year. Tree vigorous, but very irregular in its bearing; one limb will be roped with apples, whilst another does not show a fruit. Fruit very good, but not marketable to any extent. Where sour apples are so much toned down by summer heat, sweet apples are not appreciated as farther North.

Horse Apple.—This variety succeeds well, especially along the river bluffs, at Chester and below. I have not fruited it.

Hubardston Nonesuch.—Twelve years planted. A good tree and productive The apple is fine and large, but rots on the slightest provocation.

Jersey Sweet.—Thirteen years planted. A very strong, vigorous tree, quite productive, and one of our best sweet summer apples. I shall extend its cultivation for stock and home use, and I do not despair of selling the fruit, for they are pretty as well as good.

Jonathan.—Nine years planted. A tree of good shape and vigor and very productive. The fruit is very beautiful and very good. I shall plant more of it. The only fault I have to find, is that it is here an autumn apple, not much later than the Rambo.

Keswick Codlin.—Eight years planted. The tree is not entirely healthy, but rather productive. I have not made up my mind as to its true value here, but am inclined to substitute.

Kirkbridge White.—The first planting of this apple in our orchards was made in 1822, under the name of June Apple, and I have trees of various ages. It is apparently a seedling of the Keswick Codlin, resembling it in tree and fruit, but is a good eating apple. The tree is hardy, vigorous, an early bearer, productive, and the fruit fair and very good.

Large Yellow Bough.—Trees twenty-nine years old and under. We want this for family use, never for profit.

Lady Apple.—Trees thirteen years planted; have borne very little fruit. Tree healthy and strong, and the fruit approved.

Maiden's Blush.—Eleven years planted. The tree is a little difficult to establish, but vigorous when started. The fruit is marked more than other varieties by insects; but it is a good market variety, from its fine appearance and productiveness.

Newtown Pippin.—Trees forty-nine, twenty-nine and fewer years planted. This variety proves longer lived and more vigorous than its nursery growth would indicate. It bears tolerably well; the fruit mildews and cracks some years, but is always superior in quality and worth fighting for.

Northern Spy.—Thirteen years planted; has not borne much fruit as yet, and that not fair. I hear better accounts of it from others.

Ortley —Thirteen years planted; has given me very little fair fruit, and the foliage does not promise much vigor in the future.

Porter.—Nine years planted; has a very handsome, healthy tree, and bears good crops, all through the tree, of fair and even sized fruit. It is one of our best summer varieties in older orchards. I shall plant more of them.

Primate.—Eight years planted; is just beginning to bear. The tree is healthy; the fruit of good size and excellent. It will bear planting more of.

Pryor's Red.—I have trees of this, forty-nine years planted, bearing good crops of fair fruit this year. The tree is healthy, a moderate bearer, and the fruit one of our best—perhaps the best, winter apple.

Rambo.—I have trees, young and old, of this standard variety. I never found it profitable, and never disagreeable to eat. It grows well and bears well.

Rawles' Janet.—I have more trees of this variety than any other, and have found it the most profitable winter apple. The tree is healthy, low, and bears prodigiously. The fruit grows too much in clusters, and decays in consequence, and the tree, like other great bearers, is short lived. It is a late bloomer, and escapes late frosts. It requires a long season to mature its fruit well, and can endure freezing with great equanimity.

Red Canada, is successful and highly esteemed in the orchards about Bunker Hill, ten miles distant.

Rhode Island Greening.—Eight years planted; has a healthy tree, but the fruit is not fair and drops prematurely. Early picking remedies the latter fault in part.

Roman Stem.—Twelve years planted; has a tolerably, but not very, heavy foliage, and is moderately productive, of a very good, but not showy, fruit. It seems only desirable for amateur purposes here.

Roxbury Russet.—Some twenty-five years planted; has a healthy tree, and very fair, large and handsome fruit, ripening in November and December, and inferior in quality to the same variety grown north.

Rome Beauty.—Just coming in; has a moderately healthy tree and fair, handsome fruit; but I am inclined to think we can do better, even for market.

Sine qua non.—Twenty-eight years planted; has a round-headed, Puritanical tree, and bears fair crops of very good and rather tender apples. It is worth keeping up.

Smith's Cider.—Nine years planted. Trees tolerably healthy and quite productive. Fruit very fair and handsome, but barely good in quality. This is said by President Hyde and Mr. Snedecker, of our Alton Horticultural Society, to be their most profitable apple.

Sops of Wine.—Nine years planted; has a pretty good tree and is pretty productive. The apple in this latitude is medium to large, highly colored and almost sweet, in short, a strong contrast to the same variety grown in Vermont, where I found it small and acid. The skin and flesh are tough, which do not improve its eating, but vastly help its shipping qualities. Mr. Huggins, of Woodburn, and Mr. Hilliard, of Brighton, reckon it their best summer market apple.

Summer Queen.—Trees twenty-eight years old and under, have failed to give satisfaction. The tree grows rapidly and vigorously, but decays early, and its fruit is rank in flavor and generally unfair.

Swaar.—Trees nine years planted; have grown slowly, and are just coming into bearing. It is here an early winter apple, of best quality, but probably not profitable as a market sort.

Tetofsky.—Eight years planted; grows rather slowly, and very upright, with a large, healthy leaf. It bears early, and the fruit is very handsome, and the best in quality of any of the Russian varieties I have tried.—I shall extend its culture.

Tolman's Sweeting.—Nine years planted. Tree vigorous and healthy. It overbears and drops its fruit early, but the apples keep well until far into the autumn. It promises well for stock feeding.

Townsend.—I have this variety nine years planted, I suppose, under the name of Hocking. Tree healthy and productive. The fruit very good and ripening in August.

White Pippin.—Eight years planted; is just coming into bearing. Tree strong and healthy; fruit promising.

White Winter Pearmain.—Nine years planted; is promising well in tree and fruit.

Wine Sup.—Of various ages. This variety has a rather ugly tree, and with me has not been very productive. Its foliage threatens to fail. Generally, in this section, it is one of the most highly esteemed.

Willow Twig.—Eleven years planted. Tree strong and healthy. Fruit a good deal damaged every year by insects, especially by the codlin moth. Very productive.

Wine Apple.—This variety was in our old orchard of 1822, under the name of Pennsylvania Red Streak. It has a rather bad leaf and root, but bears well; and the fruit is large, highly colored and very good for all purposes.

So much for sixty-six of the varieties of apples now upon our catalogue of truits.

#### PEARS.

Burtlett, here, as elsewhere, stands first for profit, and, like the Wilson's Albany strawberry and Concord grape, forms the popular taste.

Belle Lucrative.—Nine years planted. One of our handsomest trees, and one of the worst to blight. Fruit large and excellent, but does not color enough, nor keep well enough to market to advantage.

Beurre Bosc.—A single tree; ten years planted; has proved very ugly, and borne a few fine pears this year and last. Pretty healthy.

Benric Clairgean.—Six years planted. A small, healthy tree, thus far; productive, and the fruit fair, well-colored and large. Quality a little questionable, though I have seen it very good.

Beurre d'Anjou.—Nine years planted. A vigorous, healthy tree, moderately productive. Fruit very good to best.

Beurre Diel.—Six years planted; is just coming into bearing. It is healthy, thus far, but from what I have seen of its loss of leaves, back of St. Louis, I have no great hopes of it.

Beurre Easter.—Has blighted badly with me, when cultivated, and borne indifferent fruit when not. I have not yet succeeded in making it both healthy and good.

Beurre Golden, of Bilboa.—Six years planted; has borne one fair crop of good fruit, somewhat uneven in size. More valuable pears ripen with it, and make it of no special value.

Beurre Oswego.—Six years planted; has borne but little fruit, and that not valuable. It may improve.

Bloodgood.—Nine years planted. A little inclined to blight, otherwise quite healthy. Ripens in succession to Doyenne d'Ete, and valuable for market, or home use. Productive, thus far.

Buffum.—Eight years planted; has a vigorous and healthy tree, and has borne some fruit. This year the quality is very good. Rather small for a market pear, at this season, but the health of the tree, and the keeping, after ripening, of the fruit, may make it desirable.

Dearborn's Seedling.—Six years planted. Tree rather poor fruit; pretty, and rather wanting in character. Am not yet prepared to recommend it.

Doyenne Boussock.—Eight years planted; bore fruit the first time this year. Tree strong and vigorous, but looks as if it might blight. This variety loses its leaves prematurely, in some quarters. Fruit fine.

Doyenne d' Ele.—Ten years planted. Tree pretty vigorons, but inclined to blight, somewhat. Fruit, thus far, very good, and valuable, for an early pear; much superior to that of Madeleine. It is, thus far, my best early pear. Ripeus not much after July 1.

Doyenne Gray.—Eight years planted. Tree healthy, and fruit "best," except in the matter of cracking, to which it is more or less liable. Tolerably productive.

Doyenne While.—Ten years planted. The same statement will apply to this, except that the fruit is more injured by cracking than that of the Gray.

Duchess d'Angouleme.—Nine years planted, on quince stock. Tree only moderately vigorous, but quite productive. Next to Bartlett, it produces the most marketable fruit of any variety I have tried. Variable in quality.

Flemish Beauty.—I have not fruited, but find it generally but little favored in Southern Illinois. In the North it succeeds better.

Glout Morcean.—My own trees, planted on wet ground, in 1863, died of blight, in five or six years. I know of old trees, in two localities, in this neighborhood, that are very fruitful and profitable.

Howell.—Six years planted. One of the handsomest trees, and productive. It ripens almost too near the season of the Bartlett to be planted for market, in competition with it.

Kirtland.—Eight years planted; has a nice tree, and pretty, but, to my taste, not very good fruit. Too small, perhaps, for market purposes.

Lawrence.—Nine years planted. The tree is not so healthy as I would like. Tolerably productive, of very good fruit.

Madeleine.—Eight years planted: has, to adapt the old story, but two faults: one is, that it is hard to grow the tree, it blights so badly; the other, that when the tree is grown, its fruit is too poor to pay for the pains. I can hardly understand its receiving so many stars.

Napoleon.--I have seen trees of this bearing nice fruit, at Alton, but think it is not highly valued.

Onondago.—Ten years planted. This tree has been unhealthy, but it was, perhaps, the fault of the individual trees purchased. Productive, and the fruit large and good, though coarse. I shall try it farther.

Osband's Summer.—Six years planted; produced its first fruit this year. Tree vigorous, some blight. Fruit very good, but small.

Rosliezer.—Six years planted. Tree strong, healthy, and ugly. Fruit rather numerous, very small, and very good. An Alton friend recommends it for market, in spite of its small size.

Seckel.—Ten years planted. One of the handsomest and healthiest trees, and sufficiently productive. Its color and size are against it, as a market fruit, and it sometimes rots in the packages, on its way to market; but the quality of the fruit is making its way, nevertheless.

Sheldon.—Eight years planted. Tree tolerably healthy. Fruit very desirable, in quality, and appearance. Not productive, thus far.

Steren's Genesee.—Trees six years planted; are sufficiently healthy and productive for their years, but I do not much value the fruit. Its color is not attractive, nor its flavor high.

Tyson. -Trees six years planted; are very strong and healthy, but have not borne much fruit. The fruit itself, I think very highly of.

All the pears noted were on pear stocks, excepting the Duchess.

#### PEACHES.

Bergen's Yellow.—I have not fruited. Dr. Hull, on the Mississippi Bluffs, finds it very fine, with other reniform sorts, in a dry season.

Columbia.—This variety I have grown mostly as a seedling. It reproduces itself, with a little variation in color, and season of ripening. Of about one hundred seedlings, only one seems to vary enough to make a separate propagation of it desirable. This sub-variety is some days earlier than the Columbia proper, and yellow, rather than brown, in its color. I have propagated it, by budding, and shall try it in greater quantity. In favorable seasons, the Columbia is, perhaps, our best variety.

Crawford's Early.—A very beautiful peach; one of the best for market, but there is a good deal of complaint of its tender buds, here and elsewhere.

Crawford's Late.—The same is more emphatically true of this variety.

Early Tillotson.—This variety seems a little earlier than the Troth's Early, and is a rather better peach. It is a serrate variety, however, and less healthy, and has been generally discarded. On our stronger prairie soils, however, and, I presume, with high cultivation, elsewhere, it seems to be still worthy of a place.

Early York.—This variety also serrate; seems to be more healthy in tree and hardy in bud than the Tillotson, but its fruit is more inclined to 10t.

Haines' Early Red.—The variety cultivated under this name is a favorite peach among Alton fruit growers. As far as I have seen or fruited them, I have been unable to distinguish this variety or Cole's Early Red, as I have received it, from Troth's Early, which is now the most widely known of the three. Under whatever name, it is a hardy, healthy and valuable peach.

Hale's Early.—This variety has rotted here as elsewhere, but the vigor of the tree, the hardiness of the buds, and the beauty and earliness of the fruit, make it still desirable. Judge A. M. Brown, of Villa Ridge, has ascertained, by special experiments, that even in a quite warm and humid atmosphere, this variety is quite free from rot, provided the curculio is prevented from marking it. This is also the report of Dr. Hull and others.

Healh Cling.—This variety mildews and cracks some seasons, but is one of our hardiest and finest varieties, as well as valuable for its lateness.

Kenrick's Heath.—This peach was very fine in our dry autumn of 1870, but usually is not much esteemed. White peaches, moreover, do not sell well in our Western markets; the reverse, I believe, is true in the East.

La Grange.—One of our latest and best peaches, though subject to mildew and cracking. We cannot spare it from an amateur list.

Large Early York.—A vigorous tree, with pretty hardy buds and large and fine fruit. This is at once a good market and family variety. It rots somewhat in bad seasons.

Morris While.— The tree is weak, and the fruit generally too much mildewed to be profitable; yet, in its best condition, I think it a fine peach.

Old Mixon Free. I am sorry to say I have no personal experience with this variety, but those who have, call it one of the best for market purposes. There is more agreement upon this than upon any other variety.

Smock. My own experience with this variety, in a small way, has not been very much in its favor; but it is very generally approved in this region. A successor to it is needed, which we hope to find in Salway or Picquet's Late, both of which I have under cultivation, but not yet fruited.

Stump-the-World, is a successful variety; the tree being hardy and vigorous, and the fruit large, handsome, even in size and of fair quality.

Troth's Early, has a very strong, vigorous tree, and its fruit, if not large, is abundant, beautiful and of fair quality.

Ward's Late Free. -This variety is less known than many others, and I have no personal experience with it; but I hear very good accounts of it.

Yellow Rareripe. This variety, with me, has proved tender in bud, and consequently a shy bearer; but it is, I think, the best early yellow peach, and I shall retain it, though hardly for profit.

I have one hundred and seventy-five varieties of peaches planted, and hope to be able to communicate further information of greater interest.

#### APRICOTS.

This species escaped frosts and insects this year beyond its wont, and was sold in the markets in considerable quantity.

Early Golden.--This variety seemed the hardiest, but small in size and of relative inferior quality.

Breda, if I have it right, which I doubt, much resembled the Early Golden

Moorpark, seemed more tender than these, but was much larger and finer.

Large Early, I have not fruited, but, as grown by Dr. Hull, it seems valuable.

The apricot tree here seems to be injured something in the same way as the sweet cherry, either by a retentive subsoil or winter's sun. I am inclined to think it succeeds best on the peach stock; and the finest tree I have ever seen grows in the Loess on the Alton bluff's.

#### NECTARINES.

Nectarines occasionally, as seedlings, bear heavy crops among our common peach trees, but are generally of little value. The budded varieties succeed less easily. Dr. Hull, who has fruited them more than any person I am acquainted with, pronounces Elruge the best; and that is hardly esteemed, except as a curiosity among the finer peaches.

#### QUINCES.

Angers, bears good crops of fair fruit, smaller and later than the Orange.

Orange, bears tolerably well, and the fruit is the best of any well tested varieties.

The quince has been grown by an old resident, Lyman Barber, of Troy, in this county, with great success, for twenty-five years. He recommends a rery rich soil and the bush form. He plants twelve by twelve feet, has six hundred and fifty trees in bearing, and sold one hundred barrels of fruit for nine hundred dollars, in 1868.

#### CURRANTS.

This is a hot climate for currants. By growing them in the shade, or continuous loosening of the surface through the season, they do very well; but they will not endure the neglect they suffer in cooler climates. I have given a fair trial to but few varieties.

Black Naples, succeeds tolerably well; but there is no demand, either in the home circle or the market, for its fruit.

Cherry, is healthy and pretty productive, rather acid, but large and handsome; making it a valuable market current.

Red Dutch, is still, to my mind, the best current, all things considered, that we have.

While Grape, is very nice, but, with me, very unproductive.

## GOOSEBERRIES.

The wild gooseberry of our woods, *Ribes rotundifolium*, is a good deal cultivated for its fruit, and is quite ornamental when well grown. For cooking, its flavor is preferred by some to that of the more cultivated varieties.

I have no intelligent experience with the English varieties, but am satisfied, from observation, that many of them can be grown, with a little more than ordinary care. I have tried in quantity—

American Seedling, which is upright in its growth, and so more easily picked than the Houghton's Seedling, but does not produce so large or fine fruit.

Houghton's Seedling, which is every way satisfactory, except in the trailing habit of the bush. With me, it grows of a good size, on rich ground.

Both of these varieties have mildewed, where growing overshadowed by trees, but are otherwise healthy.

#### RASPBERRIES.

I have cultivated plants from the woods, that proved thrifty and productive, but would not compete with our improved black cap varieties.

American Black Cap. if that is the proper name of the Doolittle, has succeeded tolerably well here; but is less cultivated as the Miami, or, more properly, the McCormick, becomes better known. It has been generally healthy, yet I have known it affected by the orange colored leaf fungus, on wet soil. Blight of the pear; this and analogous diseases seem aggravated and are, perhaps, in part, caused by excess of wet about the roots.

Clarke.—This variety is very good in quality, but, probably from the nature of its roots, cannot endure the droughts which are apt to set in before the end of the raspberry season; and it is too soft, with us, for market transportation.

Orange.—This variety is generally discarded, as not enduring our winters; yet I have seen it in successful cultivation on a city lot, at Springfield, in this State.

Ohio Everbearing, is quite successful near Alton, in one or two cases.

Philadelphia, is very highly spoken of by nearly all who have tried it. Wm. E. Smith, of Alton, who has given it a more extended trial than any one else in this locality, finds it so soft as to need shipping in pint boxes; but otherwise approves of it. It is the most enduring of drought, of all varieties I have noticed or tried, and here, I think, is of better quality than its reputation in the East led us to expect.

Purple Cane, is one of our best and hardiest varieties, though entirely too soft for market, even at a short distance.

McCormick, as our Illinois Society has it, and as our Ohio friends prefer to call the variety named Miami on our lists, has been extensively cultivated in the lower edge of this county, near Collinsville. There are, probably, one hundred acres or more in bearing at that point. The fruit is sold mostly at St. Louis, eight miles distant, and is found a remunerative crop. The yield per acre is reported to vary from thirty to sixty bushels.

#### BLACKBERRIES.

The culture and consumption of this fruit is rapidly extending. Next to the strawberry, it seems to be the popular berry.

Dorchester, is not much cultivated nor valued.

Kittatinny, has a varied estimate. I have heard it condemned, as no better, in any respect, than the Lawton, and inferior in fruitfulness; and, on the other hand, some

of this year's experience give it a decided preference, in uniformity of size and fine quality.

New Rochelle or Lawton.—In this latitude, this remains the popular blackberry, thus far, and deserves a good deal of commendation. In quality, it is not so good as our wild berries ripening at the same time; but its great size and productiveness tell strongly in its favor.

Wilson's Early, does not get a foothold.

I may add, in conclusion, that we had wild blackberries, in 1870, that were shipped with, and sold as well as the Lawton. They were not much smaller, and of a good deal finer flavor.

### STRAWBERRIES,

Are grown in increasing quantities, for market and home use. The Wilson's Albany is the one variety grown, nearly to the exclusion of all others. So generally is this the case, that the popular taste is getting to be formed on this somewhat acid and strong flavored berry, and the finer varieties are actually not so well liked.

Jucunda, under high culture, has succeeded well the present season.

Longworth's Prolific, holds its place in some quarters; and

Green Prolific, is in favor with some cultivators

### PLUMS.

This season the plum has ripened some three weeks earlier than usual; and the season for the latest varieties, at this writing, September 15th, is over for all except the Coe's Late Red, which is now maturing.

At this time, we propose to go hastily over a part of the list which have fruited with us, leaving the more valuable varieties for another article.

Rirer's Early.—A round purple plum, a little below medium size, very productive and a long time in ripening. This year the first ripe fruit was gathered the last days of June, while a few specimens were picked as late as the first of September. The color, time of ripening and quality of this plum, make it desirable as an early variety.

Prince's Yellow Gage.—This variety is very hardy and productive, and lasts a long time, ripening gradually from July 18th to the middle of August.—It is quite free from rot and of nearly first rate in quality, juicy and most agreeably flavored.

Duane's Purple.—A noble looking plum, but of poor quality, ripening a little before and with the last named. This is one of the varieties which is so largely grown in California for our Eastern markets. With those who grow fruit, regardless of quality, because it is showy and will sell, this variety will be a favorite.

Bleecker's Gage.—This is a yellow plum, rather above medium size; ripens at mid season or a little past. It is rather susceptible to rot; quality very good.

Imperial Gage.—This and the following were recently described. It was not, however, mentioned, that it required much care in thinning, otherwise the fruit will be small and not well flavored. This is one of the most profitable for market. Trees set twelve years ago, this year averaged about eight bushels of fruit each—nearly double that of any other variety.

Gen. Hand.—The present season, which has been remarkable for its early and continued drouth, appears not to have been favorable to this variety, as it has, for the first time with us, leaf-blighted badly, and the fruit scalded and cracked, causing a good deal of rot.

Columbia.—The trees of this variety are very vigorous and of a broad, spreading habit. Fruit extraordinarily large, of a brick red color; quality good to very good. We shall have more to say of this variety at another time.

Green Gage.—The standard for quality among plums. As ordinarily treated, the trees do not bear well, but when moderately root-pruned, they are upt to overbear and to require thinning. The trees, however, grow too slowly to make this a profitable market variety.

Red Gage.—Fruit a little under medium size, of a dullish red color; quality best. The trees are strong, upright growers, and are late coming into bearing.

Dominic Dull.--An early plum of the prune class, originated in this country from a foreign seed; very productive; nearly exempt from rotting. A good market variety; dries well. Desirable.

Ghiston's Early.—This is a very pretty and early fruit. Tree a slow grower, but an early and most abundant bearer. Fruit rather under medium size, but seldom rots.

Pond's Scedling. This is, perhaps, the most beautiful of all the very large plums. Trees strong, upright growers, with long, medium sized branches, which become pendant after the trees come into bearing. With respect to size, quality, etc., it ought to rank with Duane's Purple.

St. Catherine.— A medium sized, handsome yellow plum; does not come early into bearing, nor does it often set an over crop of fruit. It is, however, rather too small to take well in the market. The set of fruit is generally not near as great as on some of the large yellow varieties. This year, for the first time, the trees and fruit were a good deal injured by the blighting of the leaves.

Magnum Bonum or White Egg.—Trees rather tender; buds not hardier than those of the peach. Fruit very large and showy, coarse grained, of no value except for preserving and to sell.

Huling's Superb.—Trees not very hardy; growth upright; leaves of remarkable size and thickness. Fruit varies greatly in size; one specimen, grown on a young tree, measured eight inches in its largest circumference.

Lombard.—Some fanciful agricultural writer, who was probably a resident of a region where curculios were unknown, proclaimed this variety as resisting the curculio; whereas, no variety is more injured or sought by them than this. Bears heavily the alternate years; quality only good.

Morocco.—A very excellent early plum. Fruit evenly and sparsely distributed over the trees; but the trees are so subject to leaf-blight, that they but seldom mature a crop.

Chickasar.—This fruit is much enlarged by cultivation. From this, it is hoped, excellent varieties may yet be produced, by cultivation and by crossing; but, as we now have it, it is hardly worthy of cultivation where the finer varieties can be had. One argument only, so far as we know, can be urged in its favor, that is the fruit, like others of its class, in the early stages of its growth, is not very attractive to the curculio.

The notes on the plum are by Dr. E. S. Hull.

Respectfully,

W. C. Flagg.

### REPORT FROM IOWA.

COAL CREEK, KEOKUK Co., IOWA, Aug. 15, 1871.

## F. R. Еплотт,

Secretary American Pomological Society:

As the biennial meeting of our Society is soon to convene, and as, in the wise dispensation of Providence, it does not look likely that I can meet with you, and partake of the enjoyments of the deliberations, on account of ill-health, I thought, perhaps, I might write out a few notes on some varieties of fruits that I have been cultivating—that probably it might be interesting, to some, at least.

Our soil, in this part of the State, is very fertile; is from one and a half to three feet deep, of a very black clay loam, underlaid with a stiff clay sub-soil, quite retentive of moisture, mostly prairie, there being but little timber in this township.

I will mention some of the varieties of apples; first, as they have succeeded on my farm, and within my neighborhood. I might also say we have a very trying climate, frequently the extreme cold of twenty degrees below zero following a summer of great growth, and probably followed by a warm, late fall, which keeps the growing season prolonged till a sudden "snap" will injure the more tender varieties.

Early Harvest.—Nearly hardy; seldom injured by winter; not very productive while young, but doing better as it gets older. Red Astrachan.—Very hardy and healthy; not very productive, while young. Red June, or Carolina Red June.—Tree hardy; free grower; early and abundant bearer; apt to over-bear, thereby rendering the fruit quite small; said to scab in some localities, but one of our best for its season.

Duchess of Oldenburgh.—Tree hardy; good grower, after first year; does not appear to work very freely on the common seedling; root often sprouts; very early bearer; often bearing in the nursery row; fruit not as good as some; rather sour for hand eating; extra for cooking. Sweet June, or Hightop Sweet.—An excellent, early sweet apple; tree hardy; early and abundant bearer. Summer Queen.-Seems hardy. Pennock.--Hardy: good bearer, coming into bearing very early; flesh a little coarse, but a very profitable variety; sells well. American Summer Pearmain.—Tree mostly hardy, except that sometimes the bark bursts at the ground; pity it is such a poor, dwarfish tree, for the fruit is so good. Early Bough .-- Hardy; stands winter well. Cooper's Early White.—This is an apple of great excellence; good, and very early bearer; often bears in the nursery row; tree hardy; makes a most beautiful tree. I do not know where it originated, but think it is a western apple; ripe now, August 15th. Keswick Codlin. - Tree hardy; early and prodigous bearer; fruit of good size; very sour; tree very subject to fire-blight. Autumn Strawberry.—Very hardy; early bearing; beautiful tree; fruit medium; first-rate; one of the best for this climate. Fall Wine.—Not a very good tree: moderately hardy. Maiden's Blush. - Not very hardy, in the nursery, but the fruit is so fine; have to cultivate some trees; more hardy after being established in orchard. Benoni.-Best of its season; not so early coming into bearing; tree very hardy; blights some. Snow, or Fameuse,—Hardy tree; good apple; one of the best for this country. Ramsdel's Sweet. Tree very hardy; vigorous; early bearer; good, sweet apple; fall. Rambo. -Half hardy; in nursery rather inclined to late growth; when established in orchard, it requires being worked with low heads. Baily Sweet. - Hardy, or nearly so. Mother, -- Seems to do well; not bearing much yet, in this neighborhood: tree not one of the best, but fruit of such fine quality it will be planted when it becomes known. Colvert. Tree hardy, vigorous; one of the finest trees; fruit large and fine. Jefferis. - Seems hardy; not bearing yet. Jonathan. - This I will place at the head of the winter list: "it is the apple" almost; tree hardy; early bearer; fruit very fine, showy, excellent; keeps well, if gathered early; good to cook, when half grown, and has been kept here perfectly till autumn. Rawles' Janet.—Hardy; great bearer; keeps well; one of the leading varieties; escapes spring frosts by its late Ben Davis.—Tree one of the very best; always hardy; great and early bearer; fruit large and showy; not of the best quality, but profitable. Willow Twig.—Hardy tree; early and great bearer; fruit large and fair; keeps well; very profitable. Dominie.—Great grower; very early bearer, and most profuse; fruit of good quality; sometimes bark bursts at the ground. Roman Stem.—Fruit excellent; tree generally hardy; sometimes injures like the foregoing. Westfield Seek-no-farther. Hardy, good tree; don't bear so early as some. Wine Sap.—Tree very hardy; strong grower; bears well. White Winter Pearmain.—Tree hardy, strong; stocky grower; bears well; quality of fruit best for a good keeper. Yellow Bellefleur.—Tree hardy; seems variable; some trees bear well, while others are shy. Tolman's Sweet.—Hardy, great grower; very early bearer; good fruit. English Golden Russet.—Tree never

winter kills; one of the best in form, but its tendency to fire-blight is a great objection; the worst of all for blight. Sweet Vandevere.—Hardy, straggling grower; bears young. Milam.—Not fruited here yet; hardy. Northern Spy.—Hardy tree, though tardy; don't seem to suit prairie planters. They want apples. Seems to bear well, when "old enough." Perry Russet.—Hardy, superb tree; one of our "iron clads;" not so early coming into bearing as some. Red Romanite.—Hardy; early and abundant bearer; small, but profitable. Wagner—Hardy; earliest coming into bearing; blights sometimes; should be grown with low heads; if root grafted, think it would be better worked on some hardy stock; standard high. Swaar.—Tree hardy, early bearer; good crops of fair apples, every year, as good as Grimes' Golden, to my taste, if properly kept; tree rather objectionable shape: in nursery, makes a fair orchard tree. Fulton.— Not yet fruited; does not bear as early as some; tree not very hardy, but so good that we will cultivate it. Northern Spitzenburg.—Tree hardy; not a very good bearer here, viz.: not very early. Esopus Spitzenburg.—Tree seems to be hardy; rather tardy; not in bearing yet. Hubardston Nonesuch.—Tree seems to be moderately hardy; not fruited yet. Belmont, or Gate.—Tree tender; does better top-grafted on some hardy stock. Bailey Sweet.—Seems hardy, not yet fruiting. Stark.—Great grower; seems hardy; not yet fruited here.

Grimes' Golden.—Not fruited with me; though seems hardy, and bears well in this State considerably north and south of here. Rome Beauty.—Not entirely hardy; an early bearer; fine, showy apple; second quality. Smith's Cider.—Half hardy; not bearing yet. Sweet Romanite.—Tree moderately hardy, great grower, early and prodigous bearer; keeps well; good for baking in spring; excellent for cider. White Bellefleur or Ortley.—Tree not very hardy; early bearer; fruit sometimes scabs. Rhode Island Greening.—Tree moderately hardy; not bearing yet. Pennock or Big Romanite.—Tree hardy; does tolerably well. Pennsylvania Red Streak or Winter Wine.—A fine looking apple; seems like doing well; tree not most hardy. Leicester Sweet.—Seems very hardy; not fruited yet. White Rambo.—Moderately hardy; profuse bearer; excellent quality. Newtown Pippin—Not bearing yet to satisfaction; trees stand the winter well, so far. Minkler.—Great grower; much like its parent, Little Red Romanite, in growth; not fruited yet. Pomme Grise.—Good hardy tree, fruiting at six years from the root graft; seems like doing well. Dutch Mignonne.—Good grower; seems like being hardy; not bearing yet. Fort Miami.—Good grower; hardy tree; not fruiting yet. Black Gilliflower.—Hardy and fine; spreading, straggling tree.

I have tried a great many others of more or less note, but, for fear of tiring, I will omit to report on them at this time. I will give a list of the hardiest and best bearers.

Summer.—Red Astrachan, Red June, Duchess of Oldenburgh, Sweet June, Early Pennock, Early Harvest, Cooper's Early White.

Autumn.—Benoni, Keswick Codlin, Late Strawberry, Lowell, Snow or Fameuse, Ramsdell's Sweet, Colvert, and Jefferis, so far as tried.

Winter.—Jonathan, Rawles' Janet, Ben Davis, Willow Twig, Dominie, Roman Stem, Westfield, Seek-no-farther, Wine Sap, White Winter Pearmain, Yellow Bellefleur, Tolman's Sweet, Sweet Vandevere, Perry Russet, Red Romanite, Swaar. Some others are good, but these are the most hardy and reliable, so far as tried.

The Siberian apples are doing well; Golden Beauty, Montreal Beauty, Hyslop and Transcendent mostly planted now.

Of pears, the following are doing well, but few of them bearing yet:

Summer. - Bartlett, not quite hardy; Kirtland, hardy and good tree; Doyenne d'Ete.

Antumn. Flemish Beauty, very hardy and fine; Buffum, White Doyenne, Beurre d'Anjou, Belle Lucrative, Tyson, Howell, Louis Bonne de Jersey, Seckel, Sheldon.

Winter.—Duchesse d'Angouleme, Vicar of Winkfield, Beurre Easter, Lawrence, Winter Nellis, Glout Morceau.

#### CHERRIES.

Early Richmond does well, and has been extensively planted; but English Morello seems equally well adapted to the climate and soil, and is a much better cherry. Late Richmond or Kentish, seems to do well. The sweet cherries are too tender for this soil and climate; the soil forcing too strong and porous a growth for our cold winters.

#### PLUMS.

As yet the cultivation of the plum is in its infancy here; our natives having furnished the early settlers with an abundance, and some of them of really fine quality, some of which are propagated to some extent. Among the cultivated varieties, I might mention the Lombard and Reine Claude de Bavay, as doing well. Washington, Jefferson and Coe's Golden Drop, stand our winters.

#### GRAPES.

Concord is first of all; does first rate. Clinton, hardiest, and always bears. Golden Clinton, of but little account. Delaware, doing moderately; Diana, also.

### CURRANTS AND RASPBERRIES,

Red Dutch, best. White Grape, bears well. Cherry, sometimes full. Doolittle Raspberry, good, hardy, productive. Philadelphia and Clarke stand out unprotected, but fruit what is called "flat," insipid; great bearers; hang full, like apple trees. Am trying some of the newer varieties; cannot report yet.

#### BLACKBERRIES.

Kittatinny, hardy; best tried.

#### STRAWBERRIES.

Strawberries are perfectly at home in our rich prairie soil. Russell and Triomphe de Gand, or a variety I obtained for Triomphe; am not sure but it is something else; if not, it is changed by climate or soil, as it is not a solid berry like Russell. These varieties are best, all things considered, of any tried. Have tried latterly Philadelphia, Chas. Downing, Stinger, Durand, Jucunda, Austin, etc.

John Edgerton.

### REPORT FROM MARYLAND.

To the President and Members of the American Pomological Society:

Gentlemen: The progress made in fruit culture in the State of Maryland, since the termination of the late war, has been quite extensive; when we say extensive, we refer to the thousands of acres of land bordering the eastern and western shores of the Chesapeake, dedicated lately to the cultivation of the peach and strawberry; a ready market for which is to be had at our fruit preserving houses in Baltimore, as well as in the Northern and Eastern cities; the transmission thither, by railroads and bay steamers, being quick, and the business, to the orchardist, remunerative.

Maryland, as an apple growing State, does not compare favorably with its adjoining sister States, Pennsylvania and Virginia, yet we have, in our upper counties, many extensive, thrifty orchards of this fruit, the product of more than two-thirds of which is made into cider. In the vicinity of Baltimore, the apple orchards planted within the last half century, are rapidly passing into decay, partly from old age, and partly from the destructive workings of the borer, which has been permitted to multiply, as to set the perseverance and industry of man almost at defiance; and his helpmates in this work of subduing—we mean the insect-eating birds—are almost exterminated by the ruthless hand of the fowler; and we feel positive in stating, that in Baltimore County, for every three apple trees that have died, not more than one has been planted to take their place; so that we find large farmers, who formerly had from twenty to thirty acres of an orchard, have now only a few trees, affording scarcely apples enough to supply their own families.

But just as the growing of apples is on the decline, the demand and taste for pear culture as rapidly advances. We cannot boast of having very large pear orchards in Maryland; that of Ross Winans, Esq., of Baltimore, being the largest, as far as we know, and embraces a selection of over two thousand standard trees, in a very thrifty bearing condition; but there are numerous minor orchards all over the State, lately planted, the fruit of which is now reaching our markets, and we think that the time is not far distant when we shall be able to compare favorably, in the production of this delicious fruit, with any State in the Union. To effect this, much has still to be achieved, in the selection of proper sites for orchards, preparation of the soil, care in the training of the

trees after planting, as well as a proper knowledge of the most desirable kinds, and the best time for the gathering of the various sorts; and this kind of knowledge we find increasing daily, and extending itself to the mechanic and laborer; so that we find individuals owning small house lots, who are not contented, or do not consider their establishment complete, unless they possess their half dozen of Bartletts and Seckels.

Plums, in the lower and middle counties, do not succeed well, owing to the ravages of the curculio, to stop which no satisfactory remedy has yet been found. The plum wart prevails in some districts, to such an alarming extent, that scarcely a Purple Damson tree is left, where scores of bushels of that useful fruit used to be collected and forwarded to market; on the other hand, those counties bordering on Pennsylvania, produce plums of an excellent quality, and in great abundance.

In the cultivation of small fruits, no one, that I am aware of, makes a specialty in the growing of any particular kind on a large scale; that is, if we except the large fields of strawberries on lands bordering our bay, the care and culture of which forms part of farm work; but large quantities of small fruits are grown in a promiscuous way, both by amateurs and mercantile gardeners.

Vineyards of Catawba and Isabella grapes, that existed in former times, having failed from the effects of mildew and other climatic causes, their place has been taken by even a larger number of Concord, Hartford Prolific, Delaware and Ives' Seedling vines; and, in many localities, the Clinton is grown, to a considerable extent, as a wine grape; yet few people have gone largely into grape growing, with a view to wine making, as a business. Almost all of the different kinds of grapes, that have been raised in the North and West, have been tried in Maryland, and many of these give great promise of success, and among such would we especially notice four or five of Rogers' seedlings; but, on the other hand, a goodly number has reached us, that have proved unworthy of cultivation, which were heralded by their growers as the ne plus ultras of the grape kind.

In conclusion, we would say that here, as elsewhere, the cultivation of small fruits pays well, if convenient to a market, and the land light, rich and easily kept clean, with the necessary help to assist in gathering the crops, at a reasonable rate.\*

Very respectfully submitted,

W. D. Brackenridge.

### REPORT FROM NEBRASKA.

The fall of 1870 was most auspicious, in all respects, for a coming fruit crop in Nebraska for 1871. The season was late, and the wood and buds matured well. The winter, too, of 1870 and 1871 was favorable. The early spring of 1871 opened up with continued flattering prospects, and the friends of fruit growing were rejoicing in hopes

<sup>&</sup>quot; With the above report, Mr. B. gave a list of fruits, but, as he was present at the Richmond meeting, and there noted varieties, the Secretary has omitted the list report.

of being able to contribute, in a becoming manner, to the American Pomological gathering at Richmond, the coming autumn. But, alas! like other human hopes, we were doomed to disappointment. The late frost and April winds, for which our region has become characterized, destroyed all hopes of a general fruit crop. In many sheltered and protected localities, our peach crop, especially in Southern Nebraska, has been best: apples and pears good: plums and cherries not even passable. Small fruits have done better. The grape crop, notwithstanding the early bloom was cut off, was never better. Blackberries, raspberries and strawberries have been fine. Currants and gooseberries not quite as good as usual.

The persistent fruit growers, or experimenters, as they may more properly be termed, have demonstrated the fact that Nebraska can be claimed as a fruit-producing State. In substantiation of this assertion, our young State presents "living evidences," in its collection of fruits, to speak for themselves.

Our State Horticultural Society is but in its infancy, yet a permanent and growing organization, destined, we hope, to accomplish much good in the end. We have held two annual and two semi-annual meetings. But one of our meetings has partaken of an exclusive Pomological character. We have recommended no list of fruits. The discussions and conversations have been taken down and published, as uttered by the various persons and friends in attendance, and go before the world in that shape, for what they may be worth.

The following are lists of various fruits cultivated, fruited and found worthy, in our State:

#### APPLES.

Rawles' Janet, known by a host of synonyms, has been found to be the stand-by—the "old reliable." It is particularly valuable with us, because of its tenacious adherence to "winter quarters." The summer days of February and March, for which Nebraska is characterized, cannot seduce the "Jannetting" from its slumbers. It holds back until the spring is really on hand. On this particular account, this variety is indispensable in our collections. Without attempting to classify, the other varieties found reliable, are about in the order named: Ben Davis, Wine Sap, Rambo, Fameuse, Willow Twig, Perry Russet, English Golden Russet, Duchess of Oldenburgh, Red Astrachan, Early Harvest, Early Joe, Early Red, Buffington's Early, Cooper's Early White, Red June, Autumn Strawberry, Fall Orange, Mother Gabriel, Drap d'Or, Red Detroit, Fulton, Red Canada, Roman Stem, Tetofsky, Tolman's Sweet, Jonathan, Stark, Hass, Summer Queen, Spark's Late, Nickajack, Vandervere, Pippin and Swaar. Very many other varieties are being grown, not yet fruited, but which show vigor and hardiness of tree, encouraging to the friends of Pomology.

### PEARS.

Nebraska can safely be set down as reliable for pear culture. Nearly all the varieties with reasonable pretensions to hardiness, will reward the labor with us. The

following named varieties have been fruited, and are reliable: Howell, Beurre Gifford, Bloodgood, Bartlett, Brandywine, Dearborn, Osband's Summer, Rostiezer, Tyson, Belle Lucrative, D'Anjou, Beurre Diel, Buffum, Dix, Doyenne Boussock, Doyenne White or Virgalieu, Duchesse d'Angouleme, Flemish Beauty, Louis Bonne de Jersey, Seckel, Urbaniste, Beurre Easter, Glout Morceau, Lawrence, Vicar of Winkfield, Winter Nelis.

#### PEACHES.

Our people have relied principally on seedlings, of which we have produced many valuable varieties and specimens. The past year, however, quite a number of the old and well known varieties, known as budded varieties, have been fruited to satisfaction in Nebraska. Hale's Early, Crawford's Early, Early York and Troth's Early have been greatly admired, and will be more extensively cultivated hereafter. Some of the late varieties are in full fruit, showing fine specimens and an abundant crop. Crawford's Late, Heath Cling, President and Red Cheek Melocoton, are doing finely under the writer's observation. Southern Nebraska will henceforth make no small pretensions in the cultivation of the peach. Some samples of our seedlings are sent to Richmond, for inspection and name.

#### GRAPES.

We think the Creator formed the bluff lands, especially in Nebraska, on which to grow grapes; and we know no reason why the rough lands bordering the Missonri river, may not be made to equal the Longworth grape lands, near Cincinnati, or even those of the Rhine. I am aware this is an extravagant idea, somewhat; and yet I make it, fully conscions of what I say. Our grape crop has never failed; in fact, has always been at least good, generally magnificent. Thus far, but few ills have befallen the vine in Nebraska, save and except depradations by birds. Where vines have been permitted to run wild, without pruning or care, mildew has been the result, to some extent. On our high lands, grapes, in Nebraska, have an admirable aroma, and possess all the essential characteristics. The birds make sad havor with our sweet grapes. With many, patience has ceased to be a virtue, and powder and shot are resorted to.

We regard the Concord the "grape for the million." Next it, we range grapes in Nebraska about in the order named: Delaware, Roger's Hybrids, Walter, Isabella, Iowa, Diana, Catawba, Martha, Norton's Virginia, Arnold's Hybrids, Union Village, Cassady, Creveling, Maxatawny, Ives, Chinton, and Hartford Prolific. The old Catawba and Isabella have shown more evidences of tenderness than almost any other varieties, especially young vines. After the vines attain age, and become somewhat permanently established, they do much better. The Oporto, to which but little attention has been given generally, and which has received many "kicks and cuffs" from friend Hussman and others, the writer regards as a valuable wine variety. It comes into bearing early; is prolific, and perfectly hardy and reliable. My vines have never failed to give a fine crop. Last year I picked eleven hundred good bunches from one

vine, five years old. It is an exceedingly rampant grower, and, as a rule, the bunch not compact, bearing the fruit on until after first frosts in fall. I have found the Oporto to give a first-class yield of very good wines, greatly improved by age.

Plums, apricots and nectarines have only been cultivated and fruited to a limited extent. Wild plums grow in great profusion, and of very fine quality. The Bradshaw, Peach, Jefferson and Washington have been fruited with success. The Minor and Wild Goose are favorites.

The Breda and Moorpark varieties of apricots have been fruited, and are good with us.

Of nectarines, we have fruited the Boston and Early Violet.

#### CHERRIES.

The Heart cherries have not been found to do much good in the West. Both trees and fruit tender. The Morello varieties have been found most reliable. The Early Richmond leads off. The Belle Magnifique, English Morello and Late Kentish have fruited quite satisfactory, and are being cultivated to considerable extent in our State, and the West generally.

### QUINCES

Have done no good with us, and are now experimented with but little. It has been my misfortune to see but one quince tree bear, and but one year, in the past fifteen, in Nebraska.

#### CURRANTS.

The standard varieties are the old Red and White Dutch. They flourish in deep, rich soil most admirably; produce luxuriant crops of fine, large, delicious fruit. The cherry Victoria and Versailles are cultivated to some extent, and with success.

### GOOSEBERRIES.

The Houghton's Seedling and Downing's Seedling are the leading and most reliable varieties. Some of the English varieties are cultivated with success, viz.: Crown Bob, Whitesmith, Cottage Girl and Warrington.

#### RASPBERRIES AND BLACKBERRIES.

Of the raspberry we have experimented with an endless variety, but found but few, if any, superior to our native berry, which, under cultivation, is very fine. Our soil and climate is well adapted to the growth of raspberries. The finest sorts grow rampant, and the tops winter kill. Our native is a Black Cap.

What we say of raspberries may also be said of blackberries. The Kittatinny and Wilson's Early have done fine.

#### STRAWBERRIES

Flourish fine with us. We have some excellent, wild varieties, much improved by culture. Wilson's Albany seems to be the berry. The Agriculturist, Triomphe de

Gand, Russell's Prolific and Hovey's Seedling have been cultivated to considerable extent, and with success.

This season our apples and pears have been infected to some extent, for the first time, with the worm; pears, very slightly, with blight; peach, with borer, to quite an extent. As a rule, our trees and fruits are healthy, and free from ills. Fruits obtain a good character for size, form, texture, aroma and color.

Respectfully,

ROBERT W. FURNAS,
Secretary of State Horticultural Society.

### REPORT FROM VIRGINIA.

Woodford Orchard and Vineyard, Near Vienna, Fairfax Co., Va., Sept. 18th, 1871.

F. R. Elliott,

Secretary American Pomological Society:

Sir: The credit of introducing into the United States, the peach extensively known as the Heath or Heath Cling, is given by Coxe, in his work on fruit trees, to Mr. Daniel Heath, who, it is stated, brought the seeds of it from the Mediterranean. It is not my purpose to impeach the correctness of this statement; but I hope it will be regarded as the history of its origin in the Northern States. At the South, there are traditions, which likely never reached Mr. Coxe, and if they had, might only have caused him to divide the honor with a person who was somewhat conspicuous in the Revolutionary war. With a variety of any fruit, so true to reproduce itself from the seed, as the Heath peach, it cannot be otherwise expected than that there will be numerous claimants for the honor of its introduction. Mr. Coxe has presented the claims of Mr. Heath; I will now bring forward another candidate; and in doing so, I shall have to make allusions to my family, that being the source of my information, which I would most willingly omit.

Prior to the Revolutionary war, there was a strong settlement of Scotch emigrants, in Caswell County, N. C. By subsequent division of the county, that settlement fell into Person County. A Mr. Hamilton had a store there, the place being known as the "Red House." In the course of his mercantile career, he made several trips to Scotland, and on his return from one of these, brought kernels of this peach with him, which he distributed among his friends. My grandfather, (who was of Welsh descent, had married a Miss Cochran, a sister of James Cochran, who was a member of Congress in 1809–13, and grandfather of James C. Dobbin, Secretary of the Navy under President Pierce,) came into possession of some of the original kernels brought from Scotland, and raised trees from them as long as he remained in that State.

I may here remark, that when the Revolutionary war broke out, the settlement was divided, my ancestors becoming rebels, showing that they were better judges when to rebel than some of their posterity, while Mr. Hamilton embraced the royal cause, and became a lieutenant-colonel in a provincial regiment. In the course of the war, he had

a conflict with Marion's partizan corps. His military career was so different from that of Rawdon and Tarleton, that, on his return to his old home after peace, his former customers gave him a public dinner and paid their debts, notwithstanding they were canceled by the acts of confiscation. He was, I have heard, afterwards British consul at Norfolk.

My father, Paul Williams, emigrating to what is now Clarke County, Ga., in the year 1789, carried kernels of this peach with him, and it was soon extensively cultivated and called the English peach. From Georgia, he carried it to Tennessee, and establishing orchards in the counties of Franklin and Hardeman, it had a still further diffusion south and southwest, and may be now found in the orchards of my relatives in Arkansas and Texas, where the trees are seedlings, in a direct line, from the original Scotch kernels, having passed through many generations.

Accepting an office in the Treasury Department, in 1829, I was not a little surprised to find my old friend, the English peach, on the market stalls in Washington City, in all his glory, called by the name of the Heath. It was, in all respects, the same that I had known it from boyhood.

I think there is no inconsistency in the two statements, this one being of the origin of this peach in this country. Both Mr. Heath and Col. Hamilton may have obtained the kernels while in other countries, and have introduced them at different points, where they became popular. After a long lapse of time, by my taking budded trees of the variety, from Washington to Arkansas, in 1841, the two branches of the same family came together, and the most critical Pomologist cannot tell one from the other.

The Potomac Heath, now in some catalogues, is a seedling, the original tree belonging to Mr. William Dulin, in this neighborhood.

The Heath was not the only old acquaintance, under a new name, which I found in Washington, in 1829. What is called the Columbia, was known many years since, in Georgia, as the Indian peach, and is so called still in parts of Tennessee, Alabama and Arkansas. It obtained this name from the fact that the whites found it cultivated by the Cherokee Indians, in the early settlement of Georgia. When I went to Washington, it was called the Georgia peach. Mr. Frederick Keller, a clerk in the General Land Office, obtained kernels of it, while on a visit in Philadelphia, and grew trees from them in Washington. They were, doubtless, from the late Joshua Pierce, a Vice-President of the Pomological Society, who disseminated it from his nursery under the names of Black George and Golden Purple. Carrying trees of it to Arkansas, which fruiting by the side of seedling trees belonging to my brother, he informed me that it was a "full blooded Indian." When my orchard at this place began to bear, I then, for the first time, learned its true name. My trees were from a New Jersey nursery, and were labeled correctly.

I hope these notes may be of some interest to Pomologists.

Your most obedient servant,

H. C. WILLIAMS.

### REPORT FROM NEWBURGH, N. Y.

### F. R. Elliott,

Secretary American Pomological Society:

#### NEW SEEDLING GRAPES.

My experience in the hybridizing of grapes, I admit, has been of but a few years' duration, but in that time, I claim, that I have a collection of promise beyond all precedent.

Some of my seedlings have been named, and their record of values reported upon; others, in my grounds, have character and promise gratifying to me, because of the favorable words I have from men of judgment, knowledge and thought, who have visited me, and made notes of the vines and fruits, as shown and grown in my grounds, with the same exposure and position, side by side, with Delaware, Concord, Clinton, Iona, &c. I will first speak of those that have names, viz.:

My Raritan has been tested in its wine values, and with a must of one hundred and five degrees saccharometer; has an acid of nine and a half degrees; of course too much acid. It is a small grape, of delicious, sweet flesh to the taste.

My Secretary has also been tested, and gives ninety-three degrees of must, with seven and one-fourth degrees of acid. It is a large bunch, moderately compact, and with a black, roundish, oval berry. Its peduncle red at base, when drawn from the berry; juicy, sweet.

One, to which I have given the name of Adelaide, is a berry of oval shape; black, with a light blue bloom; a rich, juicy, sweet, purplish red flesh; a short peduncle, and a grape, my friends say, of high promise.

Another, to which the name of Putnam has been affixed, and which was grown from seed crossed Delaware and Concord, has stood eighty degrees in must, with seven and a half degrees of acid.

Ere going farther, I would like to say that these tests, compared with Catawba and lona, in my own ground growths, are favorable, and, as I think, may make me record worthy when they come to be grown in more favorable localities.

My lona rated ninety-eight degrees of must, nine degrees of acid; my Catawba rated seventy-seven and eighty-one degrees of must, and from nine and three-fourths to ten and five-eighths degrees of acid. Of my remaining seedlings, I shall only name a few, viz.:

Concord No. 1.—Bunch large; berry large, roundish, oval, black. A young but vigorous vine, free from disease. It was grown from seed of Concord, fertilized with Black Muscat, of Alexandria.

No. 6 A, is from Delaware and Foster's White. It is a compact bunch, with berry much the size and color of Iona. The leaf of the vine is large, lobed, serrated and very thick; wood short jointed.

My No. 10 A, is from Hartford Prolific and Purple Damaseus. It is an extra large berry, and bunch shouldered; of a Sherry wine color; meaty, juicy, and, observers say, of great promise for market use.

My No. 12 B, is from Hartford Prolific and Muscat Hamburgh. It is a large, double-shouldered bunch; berry black, with a thick, blue bloom; a strong, vigorous vine.

My No. 12  $\Lambda$ , from same parentage as above, is unlike any other of my list. Its flesh is deep purple, with a peculiar cinnamon-like flavor.

My No. 22 is from Clinton and Muscat, of Alexandria, and is, by some of my friends, counted as of great promise. It is a large, compact shouldered bunch; a large, round berry, of a greenish, amber yellow; very solid; a thick skin; flesh juicy, half tender, and vinous sweet: leaf large, thick and healthy: wood moderately short-jointed, like Concord.

Yours, &c.,

JAMES H. RICKETTS.

### REPORT FROM CHESTER, S. C.

### F. R. Elliott,

Secretary American Pomological Society:

### GRAPES.

Dear Sir: I promised, at the close of the meeting of the American Pomological Society, at Richmond, to prepare and send to you a report of the progress of my experiments, in hybridizing the grape, since my report sent to you in 1869, which would include a descriptive list of some of the best of the hybrid grapes exhibited. I regret that, owing to a mistake, the committee to whom was assigned the duty of examining the specimens, had not my descriptive list, which would have enabled them to understand my numbers and formulas; and consequently they could only make a general report as to their merits.

In my formulas, or names used to identify and describe my different varieties of hybrids, I always make the female parent's name precede that of the male, viz: Clinton and Foreign, No. 1, means that Clinton is the female parent, and Foreign is the male parent.

Clinton and Foreign, No. 1, (alias Janie Wylie.)—This variety has not failed to bear with me since 1864. All praise it highly. The only danger is that it is too Foreign in constitution, to admit of general cultivation. One of the earliest.

Clinton and Foreign, No. 6.—The male parent of this was Black Hamburgh. Wood and foliage clearly native; not the remotest resemblance to its male parent. A vigorous grower: no mildew.

Clinton and Foreign, No. 8.—The male parent Black Prince. Wood and leaves large and coarse. A vigorous grower. Bore in 1870, for the first time, when three years of age.

Clinton and Foreign, No. 9, (Muscat Hamburgh.)—A beautiful and first-rate white grape; but foliage too Foreign.

Clinton and Foreign, No. 14, (Black Prince.)— $\Lambda$  healthy, strong growing vine. Berry oblong, medium to large, transparent, few seeds.

Clinton and Foreign, No. 15, (Muscat Hamburgh.)—Closely resembles Clinton in wood and foliage. Started from seed in 1868. From all I can see, this is a promising variety. No vestige of rot or mildew.

Clinton and Foreign, No. 16, (Bowood Muscat.)—A large, dark red fruit; fine Muscat flavor.

Clinton and Syrian, No. 1.-A strong grower, void of mildew. A medium or small black fruit. Very early.

Clinton and Syrian, Nos. 2, 3, 4, 5, 6, 7, 8.—I have about sixty vines of this cross, growing in a nursery, about two feet apart.

Clinton and Black Damascus, No. 1.—Only one out of nine hybrids of this parentage, has borne.

Clinton and Pet Wylie, No. 1, Nos. 1, 2, 3 and 4.—No. 1 is a vigorous vine; wood and foliage resembling Clinton. No. 2, a white grape, of about same size, and a very delicate and peculiar flavor; wood and foliage also like Clinton.

Red Frontignan and Clinton, No. 3.—This is the only variety, out of several specimens of the same cross, which I have deemed worthy of preserving. I have never seen any red grape compare with it in beauty.

Delaware and Clinton, No. 1.—The seed which produced this variety was planted in 1868; bore for the first time in 1870.

Delaware and Clinton and Foreign, No. 1.—The wood and foliage of this hybrid are quite different from either parent, apparently.

Delaware and Clinton and Foreign, No. 2.—A remarkably vigorous grower. Foliage unusually large, tri-lobed, serrated, very thick, and rough on both sides. No rot or mildew. One of the earliest.

Labrusca and Foreign.—In 1868, I planted, in a row about three hundred feet long, about one hundred seedlings of Concord fertilized with Foreign, viz.: Bowood Muscat, Chavouk, Lady Downes' Seedling and West's St. Peter, and about fifty of Diana fertilized with West's St. Peter, White Chasselas and Lady Downes' Seedling. Of the three hundred, many mildewed badly, some died, others I gave away.

In 1863, I had over one hundred seedlings; gave Mr. Robert Guthrie, of York County, S. C., about seventy. His land was a stiff red clay. His flourished, and never

missed a full crop until this summer, when he has been absent, and neglected to prune and cultivate them.

Halifax and Hamburgh, No. 11.—I had, in 1863, over a hundred seedlings of this cross. It is much sweeter than Concord.

Delaware and Foreign.—I have had many seedlings of this cross, some as far back as 1859; all have proved failures.—I have abandoned them.

Catawba, Blond, Isabella, Halifax, Anna, Union Village, Lenoir, Herbemont and Pauline hybrids, produced by crossing any of those with Foreign, have nearly all failed, most of them from mildew and rot; but many, particularly between Herbemont and Foreign, would produce vines of healthy appearance and fruit rivaling the best Foreign, but they would fail to set their fruit. This is a great drawback in crossing native and foreign grapes. In my report of 1869, I stated that the Cordifolia appeared to be exempt from this defect, but I find, since then, some males among Clinton and Foreign hybrids; not perfect males, but very defective in the reproductive organs, and only setting a few strange looking berries to the bunch.

Peter Wylie, No. 1.—Parentage: female, Halitax and Foreign; male, Delaware and Foreign. A very vigorous, short-jointed, rapid growing vine, with thick native leaves. Holds its leaves and ripens its wood thoroughly. Bunches and berries between Delaware and Concord; round, white, transparent, becoming golden yellow when perfectly ripe.

Halifax and Foreign, No. 1.—A rapid grower, with a thick native leaf; bunches long and shouldered; berries oblong, very juicy, sweet; ripens 15th August.

Delaware and Concord.—Nos. 1, 2 and 3 of this cross have borne fruit this summer, for the first time.

Black September and Red Frontignan, No. 1.—This has been called a Cordifolia. The leaves are heart shaped and thin. Fruit ripens in September; very sour, and the same peculiar flavor as Chick or Frost grape. I have thirty-four vines of this cross, of bearing size, mostly very vigorous; some of them set their fruit badly. The fruit of many of them not much improved, being still acid, and retaining that disagreeable Chick or Frost flavor; but a few of them are much improved.

Red Frontignan and Frost or Winter Grape, bore a few berries this summer. Vine peculiar in appearance; a feeble grower.

Black Homburgh and Union Village No. 1 and Frost; Delaware and Foreign No. 8 and Frost; Halifax and Foreign No. 2 and Frost.—I have two or three dozen vines of those three hybrids, fertilized with Frost, (cordifolia.)—I did not select those to hybridize with Frost, as a matter of choice; but they were the kinds that bloomed sufficiently late, so as to be fertilized by Frost.—Those hybrids grow rapidly, have hard, slender wood and smooth leaves, very much like Frost.—Several bloomed this summer most of which were staminate.

My experience will go far to establish the following facts, viz.: that we cannot fertilize the Scuppernong with the pollen from any other species, or their hybrid varieties, or with male (staminate) hybrid Scuppernongs. Second, that we can impregnate the Foreign, (vitis vinifera,) with pollen from the Scuppernong, producing thereby only male (staminate) plants, and imperfect hermaphrodite or pistillate plants, which bear no fruit. Third, that we cannot impregnate Labrusca, Æstivales, Cordifolia, or their hybrids with Foreign, (vitis vinifera,) with pollen from Scuppernong. Fourth, that we can fertilize both native and foreign and their hybrids, with male (staminate) hybrid Scuppernong pollen, producing thereby prolific hybrid Scuppernong vines. Fifth, that we can fertilize those prolific hybrid Scuppernong plants, with pollen from the hybrid male (staminate) Scuppernong vines, thereby giving more of the Scuppernong constitution to the progeny. I find that the seed of the prolific hybrid Scuppernongs grow, and that you can impregnate other varieties with pollen from prolific hybrid Scuppernongs.

Owing to various circumstances, which I will not attempt to detail, I have not pushed the production of prolific hybrid Scuppernongs, as rapidly as I expected and desired. There is one difficulty in using the hybrid Scuppernong pollen, where we have no hot-house; it blooms, like the Scuppernong, after nearly every other grape has done blooming; but, besides this difficulty, I have lost many plants and seed already hybridized, from other sources.

Respectfully,

A. P. WYLIE.

### REPORT ON THE WILD GOOSE PLUM.

Kenticky, September, 1871.

### F. R. Elliott,

Secretary American Pomological Society:

As this fruit is now attracting considerable attention in various parts of the country, and, as I first introduced it into Kentucky, and also several of the adjacent States, it will, perhaps, not be improper, that I should state what I may know relative to its origin, history, qualities, etc.

It was first brought to my notice by the late Mr. James Harvey, of Columbia, Tenn., about the year 1850. In a letter to me, at that time, he gave me an account, as then understood, of the origin of this plum; praised it in very high terms for its fine qualities, hardiness, etc., and kindly sent me buds, as, he stated, taken from the original tree, which was standing in the vicinity of Columbia, Tenn. There were no conflicting statements, at that time, as to the place or manner of the origin of this fruit. All these have arisen since. The account given me by Mr. Harvey, in a letter, written about that time, was as follows, to-wit: That some years previous to that time, (1850,) a gentleman shot a wild goose, in that neighborhood, and on the very spot it

was thrown down and left to decompose, the next spring came up the plant now known as the Wild Goose plum; and that it was confidently believed, in that neighborhood, that the seed from which this plum tree sprang, was in the craw of the goose when killed, and this gave rise to its name.

The tree flourishes well when worked on the peach; comes early into bearing, and yields abundant crops of fruit every year. The fruit is large and handsome, of a pinkish red color, covered with a thin, delicate bloom. The flavor, though to an educated taste, not quite equal to some of the popular varieties, is, notwithstanding, very good. It is not, strictly speaking, proof against the attacks of the curculio, but the sting of this insect seems to have little or no effect on it, and, planted by the side of any of the ordinary cultivated sorts, the Wild Goose plum will produce full crops, while they will not ripen a single specimen.

This plum has a small stalk, and so soon as the fruit begins to ripen readily parts from it, which makes it necessary to gather the fruit before fully ripe. This seeming defect, however, is fully compensated for, by its ripening equally well when taken from the tree at this stage, as at any other. Indeed, I regard this characteristic as increasing its value. It enables the grower to have it in market at its best season for use. With me it begins to ripen about the 25th of June, and continues in use some three weeks.

We have, for some years past, raised this fruit for market, at our fruit farm, near Cave City, Ky., and find it the most profitable fruit we grow. It has but once I think, in the past ten years, failed to produce a full crop of fruit.

This plum, so far as I know, has no tendency to reproduce itself from seed, and, as great numbers of trees have been raised in this way, spurious and worthless varieties, bearing the name of Wild Goose plum, may be found all over Western Tennessee, Kentucky, and, perhaps, farther West.

J. S. Downer.



Catalogue of Fruits.



# PLAN OF THE CATALOGUE.

The Committee on Revision of Catalogue, consisting of the President, Hon. Marshall P. Wilder; the Chairman, P. Barry, Esq., of Rochester, N. Y.; Charles Downing, Esq., of Newburgh, N. Y.; Hon. W. C. Flagg, of Alton, Ill.; Robert Manning, Esq., of Salem, Mass., and F. R. Elliott, of Cleveland, Ohio, met, according to a published circular and agreement, in the city of Rochester, N. Y., on the 21st November, 1871. The Ilon. P. J. Berckmans, of Augusta, Ga., being unable to attend the meeting, forwarded voluminous and detailed views relative to the proposed revision. These, together with numerous reports and views of gentlemen, members of the Society, as well as the records of State societies, were carefully examined and discussed by the members of the committee present.

The labor of preparing and perfecting a catalogue of fruits to meet the sectional wants of our great country, was fully conceded to be one of great difficulty, and impossible to be so created as to avoid sectional criticism. Nevertheless, the greatest good for the greatest number being the paramount object, in connection with truth and reliability, the Committee, after examining plans of Messrs. Barry, Flagg, Berchmans and others, adopted, measurably, the one submitted by Mr. Flagg. In this plan Mr. Flagg, after arranging his States associate in climate and character affecting fruit culture, re-divided or arranged it into groups. This re-arrangement, while valuable in some points, was, on careful consideration, regarded as presenting too much of an attempt at science, without being available practically to the masses, and the simplified plan of Mr. Flagg, making three divisions and arranging States in their order of climate association in fruit growing, was adopted, and is here presented.

As in the old editions of the Society's Catalogue, the columns connected with the States, have upon lines referring to varieties the single \* to designate it as recommended; while \*\* give to it the character of superiority, and generally both for table and market use. The † indicates varieties that having been on trial not less than five years present so many good characters as to render them worthy still further culture.

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### I.-APPLES.

EXPLANATION OF ABBREVIATIONS.—The SIZE is understood by L for large; m. for medium, and s. for small. The FORM—r. c. for roundish conical; ob. for oblong; r. ob. for roundish oblate; fl. for flat or oblate; r. for roundish. The Color—y. r. for yellow and red; r. s. for red striped; g. y. for greenish yellow; rus for russetted; y. rus. for yellow and russet. The Quality—g. for good; v. g. for very good; b. for best. The Use—F. fruit valuable for all family purposes; K. M. valuable for kitchen or market purposes; F. M. family and market. The Season—s. for summer; E. A. for early autumn; L. A. for late autumn, and W. for winter. All these characters of course only designate leading positive features, and vary in their distinctness according to soil and climate in which they are grown. The Origin is shown by Rus. for Russian; En. for English; Am. for American: Ger. for German; F. for foreign.

				DES	SCRII	TION								ion-						49°
NUMBER.	NAMES.	SIZE.	FORM.	CoLoR.	QUALITY.	USE.	SEASON.	ORIGIN.	Nova Scotia. New Branswick.	Maine.	New Hampshire.	Massachusetts.	Connecticut.	New York.	Michigan.	Wisconsin.	Dakota,	Montana.	Idaho.	Washington.
1234561	Alexander American Summer Pearmain Antumn Bough Antumnal Swaar Bailey Sweet Buldwin Baltimore Cable's Gillifforer Beauty of Kent	m. m. l. l.	r. c. ob. r. c. r. ob. r. e. r. c. r. c.	g. y. g. y. r. s. r. g. r. y.	g. b. v. g. v. g. v. g. v. g.	F. F. F.M. F.M. F.M.	E.A. L.A. L.A. W. W.	Rus. Am. Am. Am. Am. Am. Am.			*	*	* * * 	* * * * * * * * * * * * * * * * * * * *	* * * *					
S 9 10	Relmant	ı.	r. c.	V. r.	D.	r.M.	· W .	⊥⊿Vm.					- +	*	*				-	
11 12 13 14 15 16 17	Ben. Davis New York Pippin. Benoul Benoul Bentley's Sweet Bethlehemite Black Oxford Blue Pearmain Bohannan Bonum Bowling's Sweet Bournssa Broadwell Brooke's Pippin Buckingham Full Queen of Kentuchy, Bachelor, Equincley.	m. m. l. s. l. l. l. lil.	r.ob, r.ob, r.ob, r.ob, r.ob, r.ob, r.ob,	y. r. g. y. y. r. r. r. g. y. y. r. y. r.	v. g. v. b. g. g. v. g. v. g.	F.M. F.M. F.M. M. M. M. M.	S. W. W. W. L.A. L.A.	Am. Am. Am. Am. Am. Am. Am.		* -	**	* * * * * * * * * * * * * * * * * * * *		* * * * * * * * * * * * * * * * * * * *	*	*				
33	Bullock's Pippin	я.	r. c.	y, rus	10,	F.M.	W.	Am.				*			*	*				
3555555	Cannon Pearmain Carolina Red June Carter's Blue Chenango Strawberry Sherwood's Favovite,	i. m. ii. ii.	r. c. r. c. r. c. r. ob. ob.c.	g. y. r. s. r. s. g. r. g. r.	V. g. V. g. V. g. V. g.	F.M. F.M. F.M. F.M.	W. 8. E.A. E.A.	Am. Am. Am. Am.				*	*	* * * * * * * * * * * * * * * * * * * *	* * *	+				
31 32 33	Cooper's Market Cogswell.	m.	r. c. r.ob.	y. r. y. r.				Am. Am.												
45555589018884585	Cornell's Fancy Cullasaga Danver's Winter Sweet Dominie Drap d'Or Dutch Mignonne Duchess of Oldenburgh Dyer or Pomme Royal Early Harvest Early Red Margaret Early Pennock Early Pennock Early Pennock Early Russet English Russet	m. m. m. l. m. m. m. m. s. l. s.	ob. r.c. r.ob. r.ob. r.ob. r.ob. r.ob. r.ob. r.ob. r. r.ob. r. r.oc. r. r.	y, r, y, s, g, y, g, y, r, s, y, r, g, y, r, s, y, r, y, r, y, r,	g. v. g. v. g. v. g. v. g. v. g. v. g.	M. F.M. F.M. M. M. F. F.M. F.M.	W. W. W. S. W. S. S. S. S. S. S. W.	Am, Am, Am, Ger, Ger, Rus, F, Am, Ger, Am, Am, En,			- k	* * * * * * * *	* * * * * * * * * * * * * * * * * * * *	*	* * * * * * * * * * * * * * * * * * * *	* * * * * *				
18 19 10 11 12	Esopus Spitzenberg Ewalt Fallawater Fornwalder, Tulpchocken.	1.	r. r.e.	y, r. g. y.   g. y.	u.	М.	W. L.A. E.A.	Am. Am. Am. Am. Am.	-			*	*	** *	**					
53 H 55	Fall Jennetting Fall Jennetting Fall Orange Fall Pippin Holland Pippin erroncons. Fall Wine Fameuse Fameuse Fameuse Fameuse Fameuse	]. n.	r. r.ob. r.ob.	у. г. g. у. г. у.	v. g. b.	F.M.	1:.X. 1:.X.	Am. Am.	-		- *			** *	*					
56 57 58 59 60 61	Fameuse Ponnac de Neige, Snow Apple.  Pour de Marie, Snow Apple.  Fourth of July.  Fulton Gabriel Garden Royal Gilpin Carl House, Little Romanile.  Golden Russet, of Western New York	m. m. m. m.	r.old r.old fl, r.ob r.ob, r. c.	r. s. g. y. r. y. y. r. y. r.	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	М. М. М.		Ger.		*	* **	*		+ +	4	* * * * * * *				
33 33 34 55 36	Cart House, Little Romanite, Golden Russet, of Western New York Golden Russet, of Massachusetts Golden Sweet Gravenstein Green Cheese Carolina Greening	m. 1. 1.	r.ob. r. r.ol.	y. rus y. rus g y. y. r. g. y.	V. g. V. g. V. g.	F.M. F.M. F.M.	- W. S. L.A.	Am. Ger.			+	* *	**	++ + + ++ +	+	* *				
67 S 50 T 22 T	Green Sweet Grimes' Golden Pippin Hall	m. <.	r.ob.	g, y, g, y, y, r, g, y, g, y, r, s, y, r	V. g. V. g.	F. F. F. K.M. M. Cider	W. W. E.A. E.A. W. L.A	Am. Am. Am. Am. F. (Am. Am.				* *	4		*					
71 75 76 77 78	Haskell Sweet Hawthornden Hartford Sweet Hewes' Virginia Crab Highly Sweet High Top Sweet Holland Pippin Holland Horse	m. S. I m.	r.c. r. r.d.	y r g y g y y r	, , , , , , , , , , , , , , , , , , ,	F M K M	- 8. - L.A. - W.	Am Am F. Am Am			*					* **				

	Pennsylvania.	Delaware	Warveland & D. C.	Virginia	North Carolina	Ohio	Indiana	Wast Virginia	Kontuelty	Themselven	THE .	THE TENTS	10 M d.	Mescalla.	Nebraska.	Kansas.	Colorado.	Ctall.	Nevada.	California.	South Carolina.	Georgia.	Alabama.	Florida.	Indian Territory	Arkaneae	Miceiceiroù	Lonisiana	Texas	Now Marrian	Arizona.	Remarks.
	* .					*	*				1 -	ķ		*	+	r*				* * *	*	*	*		-				*			Moderate hearer; showy. Slender grower, but healthy.
	***	- - - - -					*	 r	*	* -		k . k .			-1	+				*.		**							*		-	A fine table sort; not showy. Showy and fine. Unprofitable South and South-West. A hardy tree; very productive.
						¥	*	k k	*	* :	,	e k :	ę.	* *	**:	k*			-			**							. *			A coarse, showy fruit. Fine for table; too tender for shipping. Valuable shipping sort.
	*	- 4		- 1		*	*		-			* :					-			*							- 		*			Fine Winter variety. Resembles Newtown Spitzenburg. Mostly grown in Maine. Liable to drop, at the West.
			- +				- * - -																									Valued South.
			- *	: 4			*					*																				Fine for table. This may be identical with Newtown Pippin. Has many synonyms; popular in the South and South-we
	*	ķ 3	r 4			- 4	*					+ .		*						*									*			A valuable variety wherever known.
	*	* 3	k 			- 1						* .																-				Valued for Stock and Cider,
		* -	- * - 1	* *	* -	- 1			- *	* -		*	*	** -							4	*	*				- 4		. *	 K - C -		A hardy tree. Esteemed South and West. Valued at the South.
١	*	* :	-			- 4	* -		-			*	*		*																	A hardy tree; valued wherever grown,
	 *+	+ -					-			-		,	*															-				
		* -		 k :	 r - 	- 1	 					*						* * * * *								- ' 	 					Valued mainly for Stock feeding, Productive and hardy.
	*			* -	-'.  K	- : - :	-   1  -  -  -   2	-		* -		* *	* *	**	* *	*		* *		**	*	* *	*						*	k .		Valued for dessert.
	* * * *			  k :	  K .	- 1 - 1	r 3 F 3	F -			-	*	*	* * *	*	*		*	'	* *				-						, I. ][		A delicious table sort; tree of small growth. Popular market sort. Continues a long time ripening; often called Red Juneati
4 4 1	* * *				* -																											
		* .	- ;	٠																					1							
	*	*	× .	+	 k -	-	 K :	 r				*								*								 k -				
•	*		- :	÷ -		+	*	k .	-			*	*	*	**	*		*		*												A hardy tree; one of the best for the North and West.
,						_						k	*	j.																١.		v
	*		*	*	* -		* :	۲		*		*	*	**	4	**		*			¥.	*									!	Of a delicious pear flavor.
3	**																													-1.		
	*		. 1	: 4:	*	- 1	*	*						*	*	v		*		*								k -				Ripens carly and keeps late. One of the best South.
				-			+	+				÷		*								-										
) [							+					*	e	*	*	*				*												One of the most profitable of market sorts.
3				*	*		*	*				*	*			*		*		*									1			Valued only for Cider.
1						-	*	*			*	*	*	*	*	*		*		*				- (-					-  -	-		A delicious dessert apple.
5	*													- +	٠			-				١.,		-   -								

-				DES	SCRH	TION							n D	vis	lon-	-be	i w	een	42°	and	1 49°
NUMBER.	NAMES.	SIZE.	Еокм.	CoLor.	QUALITY.	Use.	SEASON.	ORIGIN.	Nova Scotia.	Maine.	New Hampshire.	Vermont.	Rhode Island.	Connecticut.	Ontario.	Michigan.	Wisconsin.	Dakota.	Montana.	Maho.	Washington. Oregon.
25288258	Haas, Hubardston Nonesuch Hunt's Russet Hurlbut Jersey Sweet Jefferis Jonathan Junaluskee Kentucky	m. m. m. m. m.	r.ob   r. c.   r.ob.   r. c.	y rus y, r y, r, y r, y r,	V V V V V V V V V V V V V V V V V V V	F.M. F.M. F.M. F.M. F.M. F.M.	W. L.A E.A. E.A.	Am. Am. Am. Am. Am. Am.				* * *	* * * *	**	*   *   *   *   *   *   *   *   *   *	**	* -				
85 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Keswick Codlin Kirkbridge White Klaproth King of Tompkins County Lady Apple Large Yellow Bough Summer Sweet Bough Lady's Sweet Late Strawberry	m. m. L		g. y. g. y. y. r. y. r. y. r g. y.	V. g. V. g.	K M. K.M. F.M. F.M. F.M.	W. S.	Am. F. Am. Am. Am.		*		* **		* * *	* * *	* -	* ::				
95 96 97 98	Autumu Strawberry. Lawver Limber Twig James River. Loudon Pippin Lowell Orange, Tallow Pippin, Queen Anne, Michigan	DL.	r.ob. fl.	y r y r y r g y	g.	F.M. M. F.M.	W.	Am. Am. Am. Am.				• ,• •			 		-				
99 100 101 102 103 104 105 106 107 108 109	Golden Pippin. Lyscom McAffee's Nonesuch Large Striped Pearmatin. McLellan Maiden's Blush Mangum Manomet Mason's Stranger Melon Minister Milam Michael Henry Pippin Monmouth Pippin	m. m. m. ii. m. l. m.	r. r.ob. r.ob. r.ob. ob. r. r.	y. r. g. y. y. r.	v. g. g. v. g. v. g	F.M. F.M. F.M. F.M.	W. E.A. W. E.A.	Am. Am. Am. Am. Am. Am. Am. Am. Am. Am.					*	* - 1	*	* - *	* *				
1H1 1H2 1H3 1H4 1H5 1H6 1H7 1H8	Red Check Pippin. Mother. Mother. Minson Sweet Newtown Pippin. Allomarke Pippin. Newtown Spitzenberg. Vandezer, of New York. Nickajack Northern Spy. Northern Spy. Northern Sweet Olio Nonpariel.	m. m. 1. m. I.	r. c. fl r.ob. r.ob. r.ob. r.c. r.ob.	y. r. y. g. y. y. r. r. s. y. r.	b. g. y. g. b. g. h.	F.M. K.M. F.M. F.M. F.M. F.M. F.M.	W. L.A. W. W. W. E.A. L.A	Am. Am. Am. Am. Am. Am.				* *		* *	*	**:	*		• • •		
119 120 121 122 123 124 125 126 127 128 129 130	Ortley White Beliflower, Woolman's Long. Peach Pond Sweet Peck's Pleasant Pittsburgh Pippin Pomme Grise Porter Primate Pryor's Red Ramsdell's Sweet Ramsdell's Sweet Ramsle Senet Red Astrachan Red Canada	I. m I. m m t. l.	r. fl r.ob. ob r-c. r.ob ob	r. s. g. y. g. y. y.rus g. y. g. y. y. r. y. r. y. r.	V. g. V. g. V. g. b. b. b. v. g. V. g.	F. M.	W.	Am. Am. Am. F. Am. Am.		***	*	* * *	**	* * * * * * * * * * * * * * * * * * * *	* * *	****	* *				
132 133 134 135 136 137 139 140 141 142 144 145 146 147	Winter of some.  Red Cathead Red Winter Pearmain. Rhode Island Greening. Ribston Pippin. Ridge Pippin Romanite, of the South Roman Stem Roxbury Russet Rome Beauty Robertson's White. Saint Lawrence. Saxton Sheppard's Sweet. Shockley Smith's Cider Smokehouse	L. m. L. s. m. m. L. m. t. m. t. m. s. L.	r. c. r ob r. r ob. fl.	y. r. g. y. r. y. rus y. r. y rus y. r. y rus y. r. g. y. y. r y. r y. r	v. g. v. g. v. g. v. g.	F. M. F.M. F.M. K.M.	W. W. W. W. W. W. L. A L. A . W. W	Am.		***************************************			***	** **  ** **  ** **  ** **  ** **  ** **  ** **  ** **  ** **	* * *	**					
148 149 150 151 152 153	Sops of Wine Homony, Soulard Stevenson's Winter. Summer Hagloe Summer Queen Harmony, Summer Pound Royal	m m 1	r.ob r.ob r.ob r.ob r.e.	y r. g. y. ( r. s.	a a a	K.M. M. M. K.M. K.M.	E.A. L.A. W. S. S.	Am. Am. Am.				- *  		*		· · · · · · · · · · · · · · · · · · ·					

		1	1	-(	'e E	tr	al	Di	vh	sic	n	-b	et	we	en	35	٥ 8	nd	14:	20		111	:	Sol	u t b	. I	Div	. – ì	1 2	5 1	45°	
NUMBER.	Pennsylvania	rellis) Ivallia	Helaware	Maryland v. D. C.		Virginia.	North Carolina.	Ollie.	Indiana.	West Virginia.	Kenturky.	Tennessee.	Himois.	Iowa.	Missouri.	Nebraska.	Kansas.	Colorado.	Utah.	Nevada.	California.	South Carolina.	Georgia.	Alabama.	Florida.	Indian Territory.	Arkansas.	MISSISSIDE.	Louislana.	Year Marian	Arizona.	Remarks.
79 80 81 83 84 84	* * * * * * * * * * * * * * * * * * * *	k -				  	- 1	* + - * * * *	* * * * * * * * * * * * * * * * * * *	* - * - *			*+ **	*	* - * - *	*	* * *		*		* * *											A hardy tree. Very valuable for market or Stock.
85 85 85 89 90 91 92	* * * *		***				- 1	***	** ** ** **		*		** * * * *	* * *		*	*		* * * * * * * * * * * * * * * * * * * *		* * * * * *		* '	**								
93 94 95 96	*			*				*	*				** + *	*	* - +		*		*		*											Hardy and productive South-west.
98 100 101 102	*			*	*		-	k	*		**	*	*	* *	*		*				*		      									A profitable market sort.
103 104 105 106 107 108 109	**	* *:		**	*			* * * * * * * * * * * * * * * * * * *	* k	*	**		**	**	*	*	** ** ** ** ** ** ** ** ** ** ** ** **		*			+	* 1	*								A valued sweet apple.
110 111 112 113 114	*	*	*	*	*		 141	k ,	k 		- -		* *	*	* * *	*	*				* .		*							-   -		Esteemed where known.
115 116 117 118 119 120 121	*			**	***		- * - * - *	* 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	K K K -		*		****									* :	* *	*								This apple is known South and West by over forty different [names. Valued for dessert; not productive. Esteemed where known. An old variety; extensively planted at the West twenty [or more years since.]
13131111111111111111111111111111111111	*+ * * *	*	*	* * * * * * * * * * * * * * * * * * * *	***			· **	* k k k	*	*	* :	*  * *	*	* * - * * * * *	* * * *								.1.								A tree of small growth; succeeds well at the North.
130 131	**	-													-							-										Extensively grown South and West,
132 133 134 135 137 138 139 141 142 142	** * * * * * * * * * * * * * * * * * * *	**		*	*			*					* * *	* :	*	* .			* -		*							- · - ·				A long keeper. Entirely distinct from Gilpin or Shockley.
141 144 145 146 147 148	**	**	*	**		*	*	- # F # 	*		*		* * * *	*	*				*		* *	**	**	*					· · · · · · · · · · · · · · · · · · ·			
149 150 151 152 153	*	**	- •		*	-	*	*				-   -	*		*	* -			* -				*	* -			- , -	-   -				

				DES	CRIP	TION			I.	—N	ort	her	n Di	ivisi	ioa-	-bet	wee	n 42	ar	ıd -
NUMBER.	NAMES.	SIZE.	<b>F</b> окм.	Coloir.	QUALITY.	USE.	SEASON.	ORIGIN	Nova Scotia.	New Brunswick.	New Hampshire.	Vermont.	Rhode Island	Contractiont	NeW York. Ontario	Michigan.	Misconsin.	Dakota. Montana.	Wyommp.	Idabo.
54	Summer Rambo	m.	fi.	y. r.	g.	М.	E.A.	Fr.	_			-		_					- 1	
55	Summer Rose	s.	r.	y.r.	b.	F.	8.	Am.					+	*	* 1	*				
56	Summer Pippin	1.	r.ob.	g. v.	g.	K.M.									* 1					
57	Summer Sweet Paradise	1.	Γ.	g.y.	V. g.	F.	E.A.	Am.					-		r					١.
58	Susan's Spice		fl.	у. г.	g.	F.	Α.	Am.												
5!)	Swaar	1.	r.ob.	g. y.	ъ.	F.M.	W.	Am.	!					*	+	*				l l -
ю (	Sweet Winesap		fl.	r. s.	v.g.	M.	W.	Am.	- '								*		- 1	
1	Taunton	1.	r.c.	y. r.	g.	F.M.	Α.	Am,												
12	Tetofsky	ш.	r.c.	r. s.	g.	K.M.	S.	Rus.			1						* *			
i3	Tewksbury Winter Blush	s.	tl.	у. г.	V. E.	F.M.		Am.												
1	Tinmouth	m.	11.	у. г.	v. g.	F.	W.	Am.				*			*					
ŭ,	Tolman's Sweet	m.	r.	g. y.	v. g.	К.М.		Am.				**		A 1	k# #	* +	e ale			
6	Townsend	m.	r.ob.	r. s.	gr.	М.	8.	Am.	٠.						+					
	Hocking.																			
i;	Twenty Ounce Apple	Ι.	r.	r. s.	V. g.	F.M.	L.A.	Am.					+	4 1	- 6	*				
	Caynga Red Streak.																			
	Wagener	m.	r.ob.	v.r.	Ъ,	F.	W.	Am.					r -		+ +	*				
i:)	Washington	1.	r.c.	y. r.	v. g.	F.M.	E.A.	Am.					r		+					
. '	Washington Strawberry.																			
0	Washington Royal		r.ob.	g. y.	g.	М.		Am.							+					
1	Waugh's Crab	s.	r.c.	r. s.	g.	Cider		Am.												
	Wealthy		r.ob.	r. s.	V. g.	F.M.		Am.									+ +			
3	Wellford's Yellow	s.	r.ob,	g. y.	2.	М.	W.	Am.												
4	Westfield Seek-no-further		r.c.	y, r.	l),	F.M.	W.	Am.						*	×	*				
.,	White Doctof		tr.ob.	g. y.	g.	K.M.		Am.												
5	White Juneating	8.	r.	g. y.	g.	F.M.	S.	F						*		*				
7	White Pippin	1.	r.ob.	g. y.	V. g.	F.M.	W.	Am.												
8	White Winter Pearmain	111.	r.e.	у. г.	V. g.	F.M.	W.	Am.												
9	White Rambo	111) -	r.oh.	g. y.	g,	M.	L.A.	Am.												
0	William's Favorite	1111	r.c.	y. r.	g.	М.	S.	Am.				* * 4								
1	Willis Sweet	1.	r.	y.r.	v. g.	K.M.		Am.				** *		*	_					
2	Willow Twig.	m.	r.c.	y. r.	g.	K.M.		Am.							т.					
3.	Wine	i.	r.	y. r.	v.g.	F.M.	W.	Am.					4	de .						
	Haye's Wine, Pennsylvania Red Streak.			,									4	*		+	T		-	
1	Winesap	m.	г.	v. τ.	v. g.	F.M.	W.	Am.						4						
5	Winter Sweet Paradise	1.	r.ob.	g. y.	v. 2.	F.		Am.						Ψ.	*		4			
6	Vates	8.	tl.	y. r.	g.	M.	W.	Am.							*		4			* 1
~	Yellow Belletleur			g. v.	v. g.	F.M.		Am.												
ŝΙ	York Imperial		tì.	V. P.	g.	F.M.		Am.	-			*	r -	+	k -	sk:				
	to the comparison of the contract of the contr		11.	9 - 1 -	£4.	11.00	** .	2 Y UII -					- 1							

# II.-APRICOTS.

The columns explain as follows: Size 4, large; m, medium; s, small. Form -r, roundish; r, f., roundish flattened; r.o., roundish oval; ob, c., oblong compressed. Color-y, o., yellow, shaded to deep orange in sun; o. r., orange, with a red cheek; o, orange. QUALITY -g, good; v. g., very good; b, best. Use—All Apricots being valued for the dessert, the letter F will signify that it is extra for the dessert, and F. M. that it is valued for table dessert, and at same time profitable for market. Season -E, early; M, medium; b, late in season of ripening. Origin—F, foreign; Am., American.

				DES	CRIP	TION.			1.		ort	heri	ı Di	visio	n	etw	cen	12	and	I 495	=
NUMBER.	NAMES.	Size.	Ровм.	Color.	QUALITY.	USE.	SEASON.	ORIGIN.	Nova Scotia.	New Bruttswick. Maine	New Hampshire.	Vermont,	Rhode Island.	Connecticut, New York,	Optario.	Wisconsin.	Minnesota. Dakota.	Montana.	Wyoming. Idalio.	Washington.	Oregon.
1	Beda	m.	r,	Ο,	v. g.	F.M.	E.	F.				F						1 1		-	
2	Early Golden	1	r. o.	Ο,		F.M.	Е.	$-\Delta m$ .						- +							
4	Heniskirke Large Early	m.	ob,e,	o.r.		F.M. F.	М. Е,	F.			٠,		- 1	+	-	-					-
5	Large Red	ı ï.		o. r.		F.	M.	F.				- 1		4	1 -						-
6	Moorpark	į.	r.	y. ο.		F.M.	1,.	F.						*	. 1				1		
¥	Peach Red Masculine	J.		Y. 0.		F.M.	L. M.	F.				1		+		1					
9	St. Ambroise			y. o.		F.M.	M.	F.	1					+		1 -	1		~		-
10	Turkey				V. g.	F.M.	L.	F.						*						-	-

Remarks.	Arizona.	Texas.	Lonisiana.	Arkansas.	Florida. Indian Territory	Mabama.	Сеогдія.	Couth Carolina.	Nevada.	l'tah.	Kansas. Colorada.	Nebraska.	Fowa.	Illimois.	Kentucky,	West Virginia.	Indiana.	North Carolina.		Delaware. Maryland & D. C	New Jersey.	Ponneylvania
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# II.-APRICOTS.

The columns explain as follows: Size-I, large; m, medium; s, small. Form-r, roundish; r, f., roundish flattened; r, o., roundish oval; ob. c., oblong compressed. Color-y, o., yellow, shaded to deep orange in sun; o. r., orange, with a red cheek; o, orange. QPALITY-g, good; v, g., very good; b, best. Use-All Apricots being valued for the dessert, the letter F will signify that it is extra for the dessert, and F. M. that it is valued for table dessert, and at same time profitable for market. Season-E, early; M, medium; L, late in season of ripening. Origin-F, foreign; Am., American.

### III.-BLACKBERRIES.

The columns explain as follows: Size-I, large; m, medium; s, small. Form-ob, c., oblong conic; r, c., roundish conical or oval; ob, ov., oblong oval. Color-b., black. QCality-b., best; g, good; v g., very good. Use-F, M, family and market: M., market. Season M., medium; E., carly; L., late. Origin Am, American; F., foreign

					scrip	TION.			1.	- 0	rthe	n B	ivisi	or—b	etwo	991	12° 8	ınd 4	45°
NUMBER.	NAMES	Stze.	FORM	Соцон.	- QUALITY.	1.8g	SEASON	Оказа.	Nova Scotia New Brunswick	Maine New Hampelting	Vermont.	Massachusetts. Rhode Island	Connecticut New York	Ontario Michigan.	Wisconsin Minnesota	Dakota.	Myonong	rdsho Washington	Oregon.
1 3 3 4	Dorchester Kittatinny New Rochelle or Lawton. Wilson's Early	1.	ob, c, r. c. ov, ob, o	b. b. b. b.	ь Б g. v. g.	F.M. M. M.	M. M. L. E.	Am Am Am Am		* * *	*	T *	+ +	*	-	-			

### IV.-CHERRIES.

The columns explain as follows: Size 1, large; m, medium; s, small. Form—ob. h., obtuse heart shape; r. ob. h., roundish obtuse heart shape; r. h., roundish heart shape; r, roundish or round. Corore 1, r., lively bright red; d. r., dark red, almost black; a. m., amber mottled with red; y. r., yellow ground shaded and marbled with red. Class H. Hearts, or tender fleshed sweet cherries; B. Bigarreau, or lirm theshed cherries; D. Dukes, having a character in tree and fruit midway between the Hearts and Morellos; M. Morellos, having sour fruit, and the tree of small, slender growth. Use -F, family, for dessert; F. M., family or market; K. M., for cooking or market; M. market. Season E, early; M., medium; L, late. Origin—F, Foreign; Am., American.

				DESC	KH"	TION.			1	Nor	her	1.00	visi	on —l	etv	veen	12,	and	49	
NUMBER.	NAMES.	NIZE.	Ровм.	Colon	CLASS.	<u> </u>	SEASON.	ORIGIN.	Nova Scotia. New Branswick.	Maine. New Hampshine.	Vermont.	Rhode Island.	Connecticut.	New York. Ontario.	Michigan.	Munuesota.	Parkota. Montana.	Wyoming. Idaho.	Washington,	Отеgon.
1 3 4 5	Arch Duke. Belle Magnifique. Belle de Choist. Belle de Orieans. Bigarreau. Grathon, Yellow Spainish.		ob.h. r h. r. r.h. ob.h.	1. r. a. m. y. r.	D. D. D. D. H.	K.M. K.M. F. F.M. F.M.	1 L. M. E M.	F. F. F. F. F.		+	ŧ	* +  *		k % ***	*					
6 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Bigarreau of Mezel.  Monstrinse de Mezel, Bigarreau Gouliulors, Black Eagle. Black Heart. Black Tartariau. Carnation. Coe's Transparent. Donna Maria Downer's Late Early Purple Guigne Early Richmond. Ellon Governor Wood. Gridley. Hovey. Kuight's Early Black Late Duke. Louis Philippe. May Duke.	1. 1. 1. m. m. m. m. m. m. s 1. 1. 1. 1. 1. 1. 1. 1. 1.	r.h. r r. r.h. r.h. r.h. r.h.	d. r. d. r. d. r. d. r. n. m. d. r. v. r. d. r. l. r. y. r. d. r. y. r. d. r. y. r. d. r.	B. B. H. D. H. M. B. H. B. H. D. D. D. D. D. D.	F.M. F.M. F.M. F.M. K.M. F.M. F.M. F.M.	M. M. M. L. L. E. E. M. M. M. M. M. E. L. L. E. E. M. M. M. E. L. L. E. E. E. M. M. M. E. L. L. E. E. E.	F. F. F. F. Am. F. Am. Am. Am. Am. F.		* · · · · · · · · · · · · · · · · · · ·		* ** *	· · · · · · · · · · · · · · · · · · ·		** * * * * * * * * * * * * * * * * * * *					
24 25 26 27 28 28 28 28 28 28 28 28 28 28 28 28 28	Morello.  English Morello, Large Morello. Napoleon Osecola Ohio Beauty Plumstone Morello. Pontiae. Red Jacket Reim Hortense Rockport Royal Duke. Trecumsch. Tradescant's Black Heart Elkhorn, Large Black Bigarrean.	1. 1. 1. 1. 1. 1.	ob.h. r. ob.h. ub.h. r. ob.k. r. ob.h.	d. r. y. r. d. r. d. r. y. r. l. r. a. m. d. r.	M. B. H. H. M. H. D. B. D. H. B.	K.M. F.M. F.M. F.M. K.M. F.M. F.M. M. M.	L. M. M. M. L. M. L.	F. Am. Am. F. Am		*	*	+		* * * * * * * * * * * * * * * * * * *	* 4					

### III.-BLACKBERRIES

The columns explain as follows: Size-I, large; m, medium; s, small—Form-ob, c, oblong conic; r, c, roundish conical or oval; ob, ov., oblong oval.—Color-b, black.—Quality-b, best; g, good; v, g, very good—Use-F, M, family and market; M, market—Season-M, medium; E, early; L, late.—Origin-Am, American; F, foreign.

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NUMBER.	Pennsylvania	New Jersey	Delaware	Maryland A D. C.	Virginia	Variable Saradina	Obia.	1	Manalla.	west virginia.	Kentucky.	Tennessee.	Hinois,	Iowa.	Missouri.	Aebraska.	Kansas.	Colorado,	Utah.	Nevada.	California.	South Carolina.	Georgia.	Mahama.	Florida.	Indian Territory.	Arkansas.	Mississippi.	Louisiana.	Texas.	New Mexico.	Remarks.
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4	×	*	*1	k ÷	*		. 4		k -				*	*	*	*	*		*		**	1										Mainly valued for market.

# IV.-CHERRIES.

The columns explain as follows: Size-I, large; m, medium; s, small. Form-ob, h., obtuse heart shape; r, ob, h., roundish obtuse heart shape; r, h., roundish heart shape; r, roundish or round. Color-I, r, lively bright red; d, r., dark red, almost black; a, m., amber mottled with red; y, r., yellow ground shaded and marbled with red. Class-H, Hearts, or tender fleshed sweet cherries; B, Bigarreau, or firm fleshed cherries; D, Dukes, having a character in tree and fruit midway between the Hearts and Morellos; M, Morellos, having sour fruit, and the tree of small, slender growth. Use,-F, family, for dessert; F, M., family or market; K, M., for cooking or market; M, market, Season E, early; M, medium; L, late. Origin-F, Foreign; Am., American.

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AUMBER.	Fennsylvania.	New Jersey.	Pelaware.	Maryland & D. C.	Virginia,	North Caronina.	OHO.	Indiana.	west virginia.	Kentucky.	Tennessee.	Himois.	lowa.	Missouri.	Nebraska.	Kanisas.	Colorado	Trub	/ cond.	Tre range.	t afficients.	South Carolina.	Ceorgia.	Alabama.	Florida.	Indian Territory.	Arkansos.	Mississippi.	Louisiana.	Texas.	New Mexico.	Arizona.	REMARKS.
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# V.-CURRANTS.

The column explain: Size-1, large; m, medium; s, small. Form-with reference to form of bunch-1, long; v, l., very long; s., short; m., medium. Color-r., red; b., black; w., white. Quality-a., scid; m. a., moderately acid; v. a., very acid. Use-K.M., kitchen and market; F.M., family and market; M., market. Season-E., early; M., medium; L., late. Origin-F., foreign.

				DE	SCRIP	TION.			1	-No	ther	n Di	vísia	n—i	etw	een 4	2° an	d 49°
NUMBER.	NAMES.	SIZE.	<b>Гоим.</b>	Coloik.	QUALITY.	USE.	SEASON.	ORIGIN.	Nova Scotia.	Maine.	Vermont.	Khode Island.	Connecticut. New York.	Ontario.	Wisconsin.	Minnesota. Dakota,	Wyoming.	Mashington. Oregon,
1 2 3	Black Naples Cherry. Common Black Black English.	l. l. s.	s. s.	ь. г. ь.	v.a.	K.M. M. K.M.	M. M. M.	F. F. F.	-				* * * *	* *	*	*		
4 5 6 7 8 9 10 11 12 13	Fertile de Palnau Fertile d'Angers	l. l. m. m. m. m.	l. m. s. l. m. m. m. m. v. I.	r.	m.a. m.a. a. m.a. m.a.	F. + M. M. F.M. F.M.	M.	F. F		*	* * * * * * * * * * * * * * * * * * * *	* * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	* *	*	*		

## VI.-FIGS-MULBERRIES-POMEGRANATES.

The following list of figs, mulberries and pomegranates was prepared by Mr. P. J. Herckmans, of Georgia. In California, and many sections of the Southern States, the fig and pomegranate is grown as readily as the apple in the middle States, while the mulberry is a success wherever the cherry succeeds.

No.	NAME.	Season.	Color.	QUALITY.	Stze.
	FIGS.	ı			
2 3	Angelique. Brunswick Madonna, Constantinople.	Early. Early.	Yellow. Violet.	Second. First.	Small. Very Large.
4 5 6 7	Black Genoa Black Ischia Celestial. Green Ischia	Early, Medium, Medium, Early,	Blue, Blue, Pale Violet, Green,	First. First. First. First.	Medium. Medium. Small. Medium.
8 9 10 11	White Ischia. Janne Hative. Lemon. Violet, long. Violet, round	Early. Early. Medium. Medium.	Yellow, Yellow, Violet, Violet,	Second. First. First. Second.	Medium, Medium, Large, Medium,
12 13 14 15	Nerii Prequesta White Marseilles Superfli de la Saussaye	Late.  Medium.  Medium.  Late.	White. Purple. White. Brown.	First. First. First. First.	Small. Small. Medium. Medium.
16	Turkey. MULBERRIES.	Early to Late.	Brown.	First.	Large.
15 18 19 20 21	Hicks' Everbearing Downing Persian Black Persian White Johnson	Early. Early. Late. Medium. Medium.	Black, Black, Black, Lilae, Black,	Second. First. First. Third. First.	Bears 3 months, Best, Very Tart,
	POMEGRANATES.				
313137 SS	Sweet Acid Violet Dway	Early, Early, Late, Late,	Reddish. Reddish. Violet. Red.	First. Third. First. Second.	Large, Very Large, Very Large, Small,

## V.-CURRANTS.

The columns explain: Size-1, large: m, medium; s, small. Form-with reference to the form of bunch -1., long; v 1., very long; s., short; m, medium. Color-r., red; b., black; w., white. QUALITY-a., acid; m. a., moderately acid; v. a., very acid. Season-E, early; M, medium; L., late. Use-K M., kitchen and market; F. M., family and market; M., market. Origin-F., foreign.

11.—Central Division between	en 35° and 42° - <b>III-South, Div.</b> -b - 28° x 35°	
NYMBER. NYMBER. New Jersey. Now Jersey. Maryland & D. C. Virginia. North Carolina. Indiana. West Virginia. Rentucky. Tennessee. Hillinois.	Ansonari. Kansas. Colorado. California. South Carolina. Georgia. Florida. Florida. Florida. Florida. Mississippi. Florida. Mississippi. Towas. Arkansas. Arkansas.	Remarks.
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# VII.-GRAPES-FOREIGN.

As the Foreign Grapes are for cultivation under glass, they are not subject to those variations induced by climate or soil, and therefore they may be regarded as equally adapted to all localities. Very few of the local committees have made any report in reference to these Grapes. The list below contains such as have been already adopted by the Society, with a few others very generally esteemed. In California, and sections of the Southern States, they require no artificial protection or heat; it has, therefore, been thought unnecessary to tabulate the States and Territories relative to them; but, taking the old catalogue, and simply adding to it a column relative to variety as adapted to a cold house, or its want of fire heat, in our Northern States, the old form is continued.

The columns explain: Ist-The Color of the fruit; 2d-Flavor; 3d-Season of maturity; 4th-Colo, for a variety that does well without fire heat-Hot, for a variety wanting fire heat. In flavor, the only distinction is between those that are simply sweet, as the Chasselas or Hamburgs, and those having a distinct musky aroma, as the Museats.

ξο.	NAME.	Culor.	Flavor.	SEASON.	VINERY
I	Barbarossa Prince Albert, Brizzola,	Black.	Sweet.	Very Late.	Hot.
0	Black Champion	Black.	Sweet.	Early.	Cold.
3	Black Damascus	Black.	Sweet.	Late.	Cold.
1	Black Frontignan	Black.	Muscat.	Late.	Cold.
Š	Black Hamburg		Sweet.	Medium.	Cold.
15	Black Prince		Sweet.	Medium.	Cold.
5	Bowood Museat	White.	Muscat.	Medium.	Hot.
8	Buckland Sweetwater	White.	Sweet.	Medium.	Cold.
ii.	Calabrian Raisin	White.	Sweet.	Late.	Hot.
.,	Raisin de Calabre.	, white.	(3), (-(-(-),	Tatte.	not.
10	Cannon Hall Muscat	White.	Muscat.	Late.	Hot.
iï	Chasselas Musquee, or Joslin's St. Albans.		Muscat.	Early,	Hot.
41	Muscut blane Hatire (2)	wille.	Muse at .	ratify,	1100.
12	Golden Hamburg Stockwood G, Hamburg.	White.	Sweet.	Late.	Hot.
13	Grizzly Frontignan Red Frontignan, Red Constantia.	Red and Yellow.	Muscat.	Medium.	Hot.
14	Duc de Magenta.	Black.	Sweet.	Early.	Hot.
15	Early Silver Frontignan	White.	Muscat.	Early.	Hot.
16	Golden Champion	Amber.	Sweet.	Medium.	Hot.
17	Lady Down's Seedling.	Black,	Sweet.	Very Late.	Hot.
18	Muscat of Alexandria	White.	Muscat.	Late.	Hot.
19	Muscat Hamburg	Black.	Muscat.	Medium.	Hot.
20	Mrs. Pince's Black Muscat	Black.	Muscat.	Late.	Hot.
21	Red Chasselas.		Sweet.	Medium.	Hot.
	Rose Chasselas.				
- )+ )	White Nice	White.	Sweet.	Late.	Hot.
23	West St. Peter's	Black.	Sweet.	Very Late.	Hot.
24	Wilmot's Black Hamburg Dutch Hambury.	Black.	Sweet.	Medium.	Hot.
25	White Sweetwater	. White.	Sweet.	Early.	Cold.
26	White Frontignan. White Constantia, Muscat blane.		Muscat.	Medium.	Hot.
27	Zinfindal	. Black.	Sweet.	Medium.	Hot.

## VIII.-GRAPES-NATIVE.

The columns explain as follows: Size—with reference to the berry, I, large; m. medium; s. small. Form with reference to bunch and berry, s. r., short bunch, round berry; I r., large and round; m. r. o., medium bunch, roundish oval berry; m. r., medium bunch, round berry. Color b., black or nearly so when fully ripe; r., redish or coppery-brownish red; g. greenish white or yellowish. QUALITY—g., good; v. g., very good; b., best - Use -T., table; M., market; W., wine. Season -E., early; M., medium; L., late. Origin -Am., American; F., foreign.

				DE	SCRH	PTION.			1.—	Nort	her	n I	tivi	sion	- h	· tw	(*(*))	12	and	1 49 :	
NUMBER.	NAMES	NIZE.	Рокм.	Conda	QUALLIA.	ار چ ج	SEASON.	ORIGIN.	Nova Scotta. New Brunswick,	Marme, New Hannushire,	Vermont.	Markachusetts.	Competition.	New York.	Ontarro. Michigan	Wisconsin.	Munneseta.	Montana.	Wyoming. Idaba	Washington.	Oregon.
1 2	Adiorndae	 in 1	m r s r o	b. r	VΨ	Т	$_{\mathbf{M}}^{\mathbf{E}}$	Am. Am				τ									
3 4 5 6 7 8 9 10 11 12 13	Alvey Catawba Citinton Concord Creveling Crioton Delaware Diana Elsinburgh Goothe Rogo's No. 1. Hartford Prolific	 31 /1 m / 8 m 8 1 - 1	mr. mro mro lro sr. sro mr. lro.	b r b b b g r r b g b	A P R R R R R R R R R R R R R R R R R R	T M W T W. T M W T T M W T M. T. M. T. M. T. M. M. T. M.	E. L. E. E. L. E. E. E.	Am Am Am Am Am Am Am Am Am		* · * · · · · · · · · · · · · · · · · ·	* *	. 4 7	* * * * * *	* * * * * * * * *	* . *	*				-	
14 15 16 17 18 19	Israella Isabella Ives Lindley Roger's No. 9.	m 1 m. m	m r.o m r o	ь г ь ь ь	v h g g g.	T W F.M.W T T M M.W	L. M L. M M. M.	Am Am Am Am Am Am			*		*	* * * *	ŀ						
20 1131111212121212 13111212121212 131112121212	Massasoit  Roger's No. 3.  Martha  Maxtawney  Merrimack  Miles  Norton's Virginia  Reheeca  Scuppernong  Telegraph  Christine.  Union Village  Contario.  Walter  Wilder	 1 1 m 1 s. s m 1 1 L m 1	sr mr mr. sr r mro		A A A A A A A A A A A A A A A A A A A	M W T M T W T W T W T M T W T M T M T M	M. M. M. M. E. H. M. M. E. M. M. M. E. M.	Am Am Am Am Am Am Am Am Am Am		*		* * * * * * * * * * * * * * * * * * *	-	* * * * * * * * * * * * * * * * * * * *	+	1					
	Roger's $No. 4$ .		_		_			-													

## IX.-GOOSEBERRIES.

The columns explain: Sizi: L, large; m., medium; s., small. Form r., round; o., oval; r. o., round; b oval. Coron r., reddish when fully ripe; g., greenish yellow, when fully tipe. QUALITY g., good; v. g., very good; b., best. Usi. K., kitchen; M.; market. Season -E., carly; M., medium; M. L., medium late. Origin Am., American; F., Foreign.

		DESCRIPTION. LNorthern Division—between 42° and 48°
NUMBER.	NAMES.	FORM. COLORG. COLORG. COLORG. CESE SEASON. ORIGIN Now Brunswick Manne New Brunswick Manne New Brunswick Manne New Brunswick Massachuserts. Rhode Island Connecticut New York Ontherio Miscardia Origina Miscardia Miscardia Origina Miscardia Origina Origina Miscardia Origina Origina Origina Miscardia Origina O
1 2 3 4	Downing Houghton Mountain. Pale Red American.	m. r.o. g. v.g. K. M.L. Am
5 6	Smith's Improved	1. O.   g.   y. g. K. M. M.   Am.   + + + + + + + + + + + + + + + + + +

NOTE ON NATIVE GRAPES. Concord. Should have \*\* for Massachusetts, Connecticut, West Virginia, Kentucky, Illinois, Iowa, Nebraska, Kansas, South Carolina, Alabama and Florida; and \* for Georgia. Interior. \*\* for Massachusetts, Rhode Island. Minnesota, Virginia, Ohto, Kentucky, Iowa and Nebraska; and \* for New Jersey, Illinois, South Carolina, Alabama and Florida. Ices \* for Virginia, Kentucky, Illinois, 'Georgia and Alabama. Norton's Virginia+\* for South Carolina, Georgia and Alabama. Suppermong. \*\* for South Carolina, Georgia, Alabama and Florida.

#### VIII.-GRAPES-NATIVE.

The columns explain as follows: Size—with reference to the berry, l. large; m, medium; s, small. Form—with reference to bunch and berry, s. r., short bunch, round berry; l. r., large and round; m. r. o., medium bunch, roundish oval berry; m. r., medium bunch, round berry. Color—b., black, or nearly so when fully ripe; r., redish or coppery-brownish red; g., greenish white or yellowish. QUALITY—g., good; v. g., very good; b., best—USE—T., table; M., market; W., wine. SEASON—E., early; M., medium L., late. Origin—Am., American; F., foreign.

	1	1	-Ce	11 1	al	Di	118	ioa	1	et	we	en	35	an	d 4:	20	1	11-	So	ufh	. 1	iv.	-b	28	820	ā°	
NUMBER.	Pennsylvania. New Joises	Delaware,	Mary land & D. C.	/ irginia,	North Carolina.	unio.	Wast Virginia	Kentucky.	Tempessee.	Hinois.	lowa.	Missonn.	Nebraska.	Colorado.	Liah.	Nevada.	California.	Georgia	Mabama.	Florida.	Indian Territory.	Arkansas.	Aussissippi. Louisiana	Texas.	New Mexico.	Arizona.	Remarks.
I :2	*		*							*			+			_					-		_	. *	-		l'nreliable.
3 4 5	* * *	*	*	*		* +						ķ.	* .					* *	+		-						Too small and imperfect. Suited only to clayey loams and certain localities Hardy everywhere.
67-83	** **	*								4	į.	+	+ -		*		4.	F *	*					*			Bunches imperfect. The most promising white variety, Wants rich soil and high culture.
10 11 12	*		*		. 1	r						*	*					*									Only valuable for the dessert.
	*	*	*	*	- 4		- 4	*		*		*			*	[	:	- 161  - 161  - 16	*					*			Liable to drop from the bunch. Makes the finest of white wine. Unreliable, except in a few locations.
16 17 18 19	A	*	[							4			*											*  			Valueless at the West. Mainly valued for a harsh, dark wine.
20	k*	١.	* :							*		*												*			
21 22 23	* +	*	*		. 1 - 4		-	*				*	+ +		+			4-									Vines require age to give perfect fruit.
	* *	*	*	 k* .	- 1 - 4	: + =	-	*		*	* '																
er es	* *	+	+	ř	* - *	#				4	*	*	<b>*</b> -		+			* *	*	*		* :	k -	-			The more known the better liked.
29		1	*											1				- +								. = /	
30 31	+ +		+		-		- 4	-   ×		+	+	+	*       -	- 4		* .											

For the list of Foreign Grapes see page XV.

#### IX.-GOOSEBERRIES.

The columns explain: Size-L, large; m., medium; s., small. Form-r,, round; o., oval; r. o., roundish oval. Color-r,, reddish when fully ripe: g., greenish yellow, when fully ripe. QUALITY-g, good; v. g., very good; b, best. Use-K., kitchen; M., market Season-E, early; M., medium; M. L., medium late. Origin-Am., American; F., Foreign.

		11.	-t'e	ntr	al	Div	isi	ion	]	rr-t	vee	n	35	an	1	3r.		Ш	   •	SOU	tb	bi	v	b es	so,	X 35	
NUMBER.	Pennsylvania.	new Jersey. Delaware,	Maryland & D. C.	Virgima.	North Carolina.	Indiana.	West Virginia.	Kentucky.	Tennessee.	Himois.	lowa.	Missouri.	Nepraska	Colorado.	Utah.	Nevada.	California	South Carolina.	Georgia,	Flavida	Indian Perritory.	Arkansas.	Mississippi.	Louisiana.	Texas.	New Mexico.	REMARKS.
1	*																										
3					. 1															.1.					'		A strong growing bush-berry with a very thick skin.
4			1		1															1							An old European sort, entirely free from mildew—more [upright than Houghton.
5 6	+ .				_l	. ,				+,			+ + + -				1		-				• •			-	New and promising.  The best of all the foreign large sorts in its immunity [from mildew.

## X.-NECTARINES.

Explanations same as for Apricots.

-				DES	CRIP'	HŌN.			1	.—:	Vor	her	n Đ	ivisi	on-	bet	wee	n 42	° an	d 49°
NUMBER.	NAMES.	SIZE.	FORM.	Color.	QUALITY	USE.	SEASON.	ORIGIN.	Nova Scotia.	New Brunswick.	New Hampshire.	Vermont.	Rhode Island.	Connecticut.	Ontario.	Michigan. Wiscobsin.	Minnesota.	Bakota. Montana.	Wyoming.	Washington.
1 2 3 4 5 6	Boston. Downton Early Newington Early Violet Elruge. Stanwick	l. l. l. l. m.	r.o. r.o. r.o. r. r.o.	o.r.	V. g. V. g. V. g. h. V. g.	F. F. F. F. F.	M. E. E. E. L.	Am. F. Am. F. F. F.						- x						

#### XI - PEACHES.

The columns explain: Size-1, large; m. medium; s. small. Class-F. freestone; C. clingstone. Color-relative to the flesh, w. white or pale colored; y. yellow or yellowish; g. greenish white, red at stone. Quality-j. v., juicy, vinous; m. j. r., melting, juicy, rich; s. j., sweet and juicy; s. j. h., sweet, juicy and high flavored. Glands-s. serrated, without glands; g. glands globose; v. glands riform. Season-the Season of maturity, as Early, Medium or Late; those designated as Early, ripen in lat. 43 deg. previous to or about Sept. 1st; Medium, those ripening from 1st to 15th of Sept., and Late those after that period; a few of the Very Early and Very Late are so designated-E. early; M. medium; L. late; V. E., very early; V. L., very late. Ortigin-Am., American; F., Foreign

				DES	SCRIPT	TON			1.—	ortl	ie <b>t</b> n	Divi	sion—	betw	een -	12° a1	nd 49°
NUMBER.	NAMES.	Stze.	CLASS.	Color.	QUALITY	GLANDS	SEASON.	Овібіх	Nova Scotia. New Branswick.	Maine New Hampshire.	Vermont Massachusetts.	Rhode Island. Connectiont	New York. Ontario	Michigan Wisconsm	Mumesota Dakota	Montana. Wyomneg.	Idaho. Washington.
1100445678981111811116111811981111181818181818181	Amelia Baldwin's Late Barnard Bellegarde Bergen's Yellow Chinese Cling Cole's Early Red Columbia Condidge's Favorite Crawford's Early Crawford's Early Crawford's Late Druid Hill Early Newington Free Early Tillotson Early York Eaton's Golden Foster George the Fourth Grosse Mignoune Haine's Early Red Hate's Early Heath Cling Hyslop Cling Indian Blood Cling Jacques Kenrick's Heath Heath Freeston Lady Parham Lady Early York	1. m.	F. C. C. C. F.	W. W. Y. Y. Y. W. Y.	m.j.r j. m. s. j. v. s. j. v. m.j.r j. v. s.j.h. j. v. m.j.r s.j. v. m.j.r s.j.h. s.j.h. s.j.h. s.j.h. s.j.h. s.j.h.	r. r. g. g. r. r. g. r. g.	M. M. L. V.L. E. V.E. V.E. M. V.E. V.E. V.E. V.E. V.	F. Au. Au. Am. Am. Am. Am. Am. Am. Am. Am. Am. Am			***************************************	** *	* * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *			
30 31 32 33	Large White Cling Late Red Rareripe Lemon Cling Leopold L	1.	г. С. Е. С. F.	W. W. V. Y.	s.j.h. s.j. s.j.h. j. v. j. v.	r. g. r. r.	1 M. 1 M. M.	Am.				*	*	4			
医克里氏性氏征 计记录 计记录 化二甲酚 医克里氏病	Leopold Freestone. Matta Molden's White Morris' White Mountain Rose	l. l. m i. l. l.	医阿巴克氏氏征 医巴巴氏氏征 医克里氏氏征 医克克氏氏征 医克克氏氏征 医克克氏征 计算法 计记录	g. W. W. W. G. W. Y. W. W. W. Y. Y. Y. W. W. W. W. Y. Y. Y. W. W. W. Y.	m. j.r. s. j. m. j.r. s. j.h. s. j.h. v. s. j.h. s	8 m. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	M. L. M. M. M. M. M. M. E. M. L. M. L. M. L. M. L. M. L. L. M. L. L. M. L. E. M. L. L. M. L. E. M. L. L. L. M. L. L. L. M. L. L. L. M. L.	F. Am. Am. Am. Am. Am. Am. Am. Am. Am. Am		-	- 16		* * * * * * * * * * * * * * * * * * * *	***************************************			

# X.-NECTARINES. Explanations same as for Apricots.

1	l. –	- i e	'n	ra	1 1	di	is	je	n-	_ i	be	t	Ve	e	)	3.5	_	a 1	d	4	20		Ė	П	1-	×c	11	th		Di	v		b,	2	10	d:	35	-
Pennsylvania. New Jersev.	Delaware,	Maryland & D. C.	Virginia.	North Carolina,	Ohio,	Indiana	Word Circuit	nest viigilia.	Kentucky.	Tennessee.	Himois		IIIM'a.	Missentri	Visit makes	Mendaska.	Kansar.	Colorada		CTRO.	Nevada.	California		South Carefina.	Georgia.	Minhama	Aldballa.	Florida.	Indian Perretory		Arkansus.	Mississipper		Landisiana.	Texas.	New Mexico.		All Colled.
		*				* *								*						- 1		-					-			-   -	-		- -	-				

## XI.-PEACHES.

The columns explain: Size-1, large: m, medium: s, small. Class-F, freestone; C, clingstone. Color-relative to the flesh, w, white or pale colored; y, yellow or yellowish: g, greenish white, red at stone. QUALITY-j, v., juicy, vinous; m. j, r., melting, juicy, rich: s, j., sweet and juicy: s, j. h., sweet, juicy and high flavored. Glands-s, serrated, without glands; g, glands globose; r, glands reniform. Season-the Season of maturity, as Early, Medium or Late; those designated as Early, ricen in lat. 43 dec. previous to or

~k35°	
REMARKS.	
This originated in South Carolina, and d	differs from t Missouri Ameli
Berckmans thinks it is same as Shanghae.	٠.
·····	
·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	
:-  :-	

The column explain as follows: Size—s., small; l., large; m., medium. Form—p., pyriform; r. o. p., roundish obtuse pyriform; r. a. p., roundish acute pyriform; ob. p., obtuse pyriform; ob. o. p., oblong obtuse pyriform; r., roundish; r. ob., roundish obtuse. Color—y. g., yellow or yellowish green with a red or russet-red cheek; y. r., yellow and russet; y., when mostly yellow or yellowish. QUALITY—g., good; v. g., very good; b., best. USE—F., valuable family dessert; K. M., kitchen and market; F. M., family and market. Season—S., summer; L. S., late summer; A., autumn; E. A. early autumn; L. A., late autumn; W., winter. Origin—En., English; Am., American; F., French; Fl., Flemish; B., Belgium; H., Holland.

				DES	CRIP	TION			I	Nor	ther	n Di	isio	ı-be	twe	n 42	and	1 499
NUMBER.	NAMES.	SIZE.	Еокм.	Coror.	UUALITY.	Use.	SEASON.	ORIGIN.	Nova Scotia   New Brunswick,	Maine.	Vermont.	Rhode Island	Vennecticut New York,	Ontarro Michigan	Wisconsin. Minnesota.	Dakota. Montana.	Wyoming.	Washington.
1 2 3 4 5 6	Abbott Ananas d'Ete. Andrews. Bartlett Buronne de Mello Belle Lucrative. Fondente d'Antonne. Belle Epine Dumas	1. 1. ol	р. р. Б.о.р а.р. о.р.	y. r. y. g. y. g. y. r. y. r.	v. g. v. g. v. g. v. g. v. g. b.	$\mathbf{F}.\mathbf{M}.^{1}$	E.A. E.A. L.S. E.A. E.A.	Am. H. Am. En. B. Fl.			+ -   +  ,	* * * * * * * * * * * * * * * * * * * *	· · · * · · · * · · · * · · · *	* **	*			
8 9 10 11 12	Ince de Bordeaux. Beurre Bose. Beurre Clairgeau. Beurre d'Anjou. Beurre d'Anjou.	l. l. l. o l. r.	p. P b. p.	y, r. y, r. y, g. y, g.	b. g. v. g.	F.M. M. M.F. M.	L.A. L.A. E.A.	B. F. F. B.		*	* * *	*	* * * * * * * * * * * * * * * * * * *	* **	, .			
13 14 15 16 17 18 19	Beurre d'Brignais Des Nomes, Beurre Diel. Beurre Giffard Beurre Hardy Beurre Langelier Beurre Superfin Bloodgood Brandywine Brialmont Buffum Caen de France	1. r. m. 1. o m. o m. r m	ob.p p. b. p. b. p. b. p. · p. · r. .o.p.	y. r. y. g. y. g. y. r. y. r. y. r.	* * * * * * * * * * * * * * * * * * *	F.M. F.M. F.M. F.M. F. F.	L.A. 8. E.A. W. A. 8. 8.	B. F. F. Am. Am.		*		k + * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *	* * *	*			
200000000000000000000000000000000000000	Catillac Clapp's Favorite Calgoritis	1. r. 1. of	а.р. Бор ю.р. ю.р. Б.р.	y. g. y. g. y. g.	v.g. v.g.	F.M. F.M. K.M. F.M. M.K. F.M. F.M.	A. E.A. W. W. S. W. L.A	B. Am. F. F. Am. Am. Am.		* '	*	k *   k   k *	. *	* 1	*			
25 28 20 30 31 32 33 34	Dallas Dana's Hovey Dearborn's Seedling Dix Dix Doctor Reeder Doyenne Boussock Doyenne d Alencon Doyenne dn Comice	S. F. S. T. L. O. S. F. L. F. III. T. L. F.	. D.	y. g. y. y. r. y. r. y. r. y. r.	V. 12	₽,	8.	Am. Am. Am. Am. B.				* * *	* * * * * * * * * * * * * * * * * * * *	* *	*			
34 35 36 37 38 39 40 41	Dix Doctor Reeder Doyenne Boussock Doyenne d'Alencon Doyenne du Comice Doyenne de Ete Duchesse d'Angouleme Duchesse d'Berri d'Ete Duchesse de Bordeaux Easter Beurre Emile de Heyst Flemish Beauty Fulton. Golden Beurre of Bilboa Glout Morceau Gray Doyenne	1. ol 8. r 1. t 1. t	b.e p .ob. r ob. p. ob. p.	y. y. r. y. r. y. r. y. r. y. r. y. r.	v. g. v. g. v. g. v. g. v. g. v. g.	F.M. F. M. F. F. F.M	A. S. W. L.A. E.A.	F. F. B. B.		* .	*	* ** * **	* **	* **	*			
42 43 44 45 46	Golden Beurre of Bilboa Glout Morceau Gray Doyenne Henkel Hosenschenek Moore's Pound, Howell	m. r	.ob.	у.	v. g. h. v. g. g. y. g.	М.	E.A. L.A. L.A. E.A. S.	F. B. Am.				* *	* * * *	* .				
48 49 50 51 53 54	Jalonsie de Fontenay Vendee Jaminette Josephine de Malines Julienne Kingsessing Kirtland Knieha's	m. r m. r m r.	.a.p. ob.p .ob.p .ob. b. p.; ob.	y, r, y, r, y, r, y, r,	v. y.	EM	M. W. S. E.A. E.A.	F. Am. Am. Am.				- * - * * * * *	* * * * * * * * * * * * * * * * * * * *	* *				
55 56 57 58 59 60	Knight's Seedling. Lawrence Lawise Bonne de Jersey Madelaine Madanne Eliza Manning's Elizabeth Marie Louise	l. o m. l. r s. o	հ_ր̂, -p. :a.p., հ. ը.	y. g. y. g. y. r. y. r.	V. g. V. g. V. g.	- F. M.	.X.	Am. F. F. B.		*	• •	* * * *	***	* *				
61 62 63 65 65	Madane Eliza Manning's Elizabeth Marie Louise Melaoghlin Merriam Monnt Vernon Napoleon Nonveau Poiteau	n. r. n. r. l. o	ob.	у. г. у. г.	V. g. V. g. g. g.	. F.M	$egin{array}{c} W \\ A \\ LA, \\ A \\ LA, \end{array}$	Am. Am. Am. B. B.		* ;	*	* * *	* * *	*:				

The columns explain as follows: Size—s., small; l., large; m., medium. Form—p., pyriform; r. o. p., roundish obtuse pyriform; r. a. p., roundish acute pyriform; ob. p., obtuse pyriform; ob. o. p., oblong obtuse pyriform; r., roundish; r. ob., roundish obtuse. Color—y. g., yellow or yellowish green with a red or russet-red check; y. r., yellow and russet; y., when mostly yellow or yellowish. Quality—g., good; v. g., very good; b., best. Use—F., valuable family dessert; K. M., kitchen and market; F. M., family and market. Season—S., summer; L. S., late summer; A., autumn; E. A., early autumn; L. A., late autumn; W., winter. Origin—En., English; Am., American; F., French; Fl., Flemish; B., Belgium; H., Holland.

	Pennsylvania.	New Jersey.		Virginia.	North Carolina.	Ohio,	Indiana.	West Virginia.	Kentucky.	Tennessee.	Illinois.	Minesone.	Nobresia.	Kansas	Colorada.	Utah.	Nevada.	California.	South Carolina.	Georgia.	Alabama.	r Joriga. Indian Territory	Arkansas,	Mississippi.	Lomistana.	Texas.	Arizona.	Remarks.
	'-	*					-							-			-		-			-			-		-   -	
	** *	*	-(-	-   * : +   * :		**	**	*	*		** *	-   . *   a	-  -	* *		*		**	*	** *	 k #	* -	-		Œ.			Like all pears, should be gathered ere fully ripe, or liable [decay at cor
,	** *	E# 7	* ×	e   -		*	*		*	3	++ .	- 3	 k .	*	 k			¥	**	** *	*						-	Not profitable for market.
i			k .			+				-	† .	- -	- <sub> </sub> .		-						٠	Ÿ			-			
	* *	* *	* *	* *		**	*				* - *  .	- 1	k .		1			**	**	**	-			ì				
3	** *	* .	- *	* **		**	*	*	*		***	* 1		*		*			**		. i.			-			- '	Quality inferior.
	* -		- [ a	*		**	* 1		*	-	* 1			*		*		*	*	* •		.   .	.				-	
1	* :	* *	k :	. *		*	*	*	* .		* 1		- *	*		*		**				-'-					-	
	* -		- *	- * *		**	*				* +			*		*		*	- '	· * *						-		Trees very healthy.
1	* -		K 3			*	*	. [						*	,	*		*										
	* :	* 4		**		+	*	*	*	-   -	* *			*		*		*						-			-	
	+ .		- 4			7,	+				+ +	4	+	+				+								-		Liable to drop ere ripe.
	+ .		- 1-			+		! 			† . † .	- [ . - [ -	-1-			 						-   -					1:-	manic to drop ere trpe.
	* .	- 1.		*		*	*	*	* .		* -	- l a - l -	*	*		*		*		-								5.00
	* *	* *	 - »			**		*	*		* *		*	*		*		*			-						-	Delicious, but too small to meet the present market wan
	- · ·		.   .				*	*	*		* .			*		*		*										
1	** *	* -	- * 	***		**	*	* :	* * .	*	or *	* *	Y 1	E # 1		*		**	**	***	* -						-	
	- 's		- *	**		7	*	×		-	· - * 4 † .	*	. *	1				**				-						
	* -		**	**			**	*	*	*	* *	k, *	- 1	r *		*		**	**	١.	* -	-		-				Begins to fail East, A hardy, productive tree.
	*  -	-	- +	*		*	*	-		-	* -	- 1	- i * *				- 4	*								-		Unreliable at the North.
	* - * -	-			-	**	*				* .	-   -	 ]]					*										Fails in Eastern States. Fine for the table. A profitable market sort.
	** -		. *	. + +		*	*	*		. *	* *	  c	 		١	ı,		*									-	11 produces market solo
						*	4					.	-		-			4								-		An old variety; very healthy and productive
1	* *	*	*	**		*					- 1														1:1			A pear of great promise in its seasou.
			*	+		*	*			- 1-	* -			l 														
*	* *:	* *	**			*	*		k ir		* *	* *	i 1					*		4	4 -							A hardy tree.
1	* -	*	*	*		**	*	*	*		* 4			*			.,	*	*		-						-	Very productive and profitable. Some say liable to blight,
-				1		+				. ' -	* -		-   -															A capital pear, but unreliable.
		1				+ +					-		-	 -														A capital pear, but unreliable. Hardy and promising. Valuable for market.
			*			*					*	- 1-	 								-							

[CONTINUED.]

The columns explain as follows: Size-s., small; l., large; m., medium. Form-p., pyriform; r.o.p., roundish obtuse pyriform; r.a. p., roundish acute pyriform; ob. p., obtuse pyriform; ob. o. p., oblong obtuse pyriform; r. roundish; r. ob., roundish oblate. Color-y, g., yellow or yellowish green with a red or russet-red cheek; y. r., yellow and russet; y., when mostly yellow or yellowish, QUALITY-g., good; v. g., very good; b., best. USE-F., valuable family dessert; K. M., kitchen and market; F. M., family and market. Season-S., summer; L. S., late summer; A., autumn; E. A., early autumn; L. A., late autumn; W., winter. Origin-En., English; Am., American; F., French; Fl., Flemish; B. Belgium; H., Holland.

				DES	CRIP	TION.			1.	-!	ort	her	n D	ivis	lon-	-be	twe	en-	42°	and	1 49
THE PROPERTY.	NAMES.	SIZE.	Ровм.	Coron.	QUALITY.	U'SE.	SEASON.	ORIGIN.	Nova Scotia.	New Brunswick.	New Hampshire.	Vermont.	Massachusetts. Rhode Island.	Connecticut.	New York, Ontario,	Michigan.	Wisconsin.	Dakota.	Montana.	Idaho.	Washington.
ti .	Onondaga Swan's Orange,	1.	ob. p.	y. g.	v. g	F.M.	L.A.	Am.				* *	* *	*,	* *	*					
~	Osband's Summer	8.	r. p.	y. g.	v g	F. F.	S.	Am.				3	* *		* · ·						
8	Ott	8.	r.	y, g	Η.	F.	S. E.A.	Am B.	,	' -			- *	*	*					-	
9	Paradise d'Automne		r.a.p.	y. r. V.	V g	1 M.	W.	В.	• •			*	* *		*					-	
$v_{\perp}$	Passe Colmar	S.			g.	21.	S.	Am,													
1 '	Pinneo or Boston	î.	p.	y. g.	H	K M	W.	, 1111,		-		. ,	*								
2	Pound Belle Angevine, WinterBell, Uvedale's St. Germain		1,,	,,,	-		1			٠٠,				Τ,	*						
3	Pratt	m.	ob, p,	y. r.	g.	$\mathbf{M}$ .	E.A.	Am.					k - k		*						١
4	Rostiezer	S.	p,	y. g.	Б.	F	S.					* *	* *	*		*	!				
5	Rutter	m	r. ob.		Vg	F M	.1.	Am,			- +-				*						
6	St. Ghislan	m	Ţ1.	y.	g	FM.	E.A.									l!					
7	St. Michael Archamel	J.		y. g.	g	F M	Α.					*		* 1	*			'			
8	Seckel	S.	Γ,	y.g.	b.	FM	Α.	Am.						* *	** *	*	*	٠			
9	Sheldon	m.	r.	y - g	v. g	FM	Α.	Am.				- *			k*	٠,			1-		-
0	Sterling.	m.	r	$\mathbf{y}_{i}, \mathbf{g}_{j}$	V. g.	EM	E.A.	Am.					*		*	*			111		
1	Stevens' Genesee	1	1.	у.	V. g.	F.M.	E.A.	⊢Am. ⊢B.							* *	1.0			}-		- ' - '
2	Supreme de Onimper	111.	1 F P .	y. g.	V. g.	F	8.	Am.		-		3	*								
3	Tyson	m.	r.a.p.	. У. ц. . V. ц	- υ. ⊤V. <u>α</u>	F.M	A.	B.			*		* *	*	* *	*					-
1	Urbaniste	m. L	p.	. y. g V.	g.	K M.		F.			*	* :	* ' +	* 1	** -	1.					
5	Vicar of Winkfield		•		-	F.M					,	* *	* *	Ť	* *	*					
15	Washington.	m.	- ախ. գ. ք	. y.	V. g	F.M.	E.A	Am.					* *		*				-		
٠ <u>.</u>	White Doyenne Virgalicu.			y. g.	Ь.			1				*			*	*					
R	Wilbur	ş.	Γ.	Y . T .	g.	3	E.A	Am. B.	•				* *								
9	Willermoiz	1.	op, p.	y. r.	g.	M	L.A.	B.					*						-		1
Θ,	Winter Nelis					F.M.	S.	13.		-	- '	*	* *		44 *	*				~	-   -
1	Windsor	1.	P.	g.	g.	M	٠٠.				-	1	*	100	- *			1.		-11.	1

[CONTINUED.]

The columns explain as follows: Size s., small; l., large; m., medium. Form -p., pyriform; r. o. p., roundish obtuse pyriform; r. a. p., roundish acute pyriform; ob. p., obtuse pyriform; ob. o. p., oblong obtuse pyriform; r., roundish; r. ob., roundish oblate. Color-y. g., yellow or yellowish green with a red or russet-red cheek; y. r., yellow and russet; y., when mostly yellow or yellowish. QUALITY-g., good; v. g., very good; b., best. USE-F., valuable family dessert; K. M., kitchen and market; F. M., family and market. Season-S., summer; L. S., late summer; A., autumn; E. A., early autumn; L. A., late autumn; W., winter. Origin-En., English; Am., American; F., French; Fl., Flemish; B., Belgium; H., Holland.

		H.		Ce	nt	ral	D	iv	isi	on	-	be	tv	ee	n	35	0 8	n	d 4	120		I	H	-S	ou	t ł	1.	Di	٧	b.	250	&3	5°	
NUMBER.	Pennsylvania.	New Jersey.	Delaware.	Maryland & D. C.	Virginia.	North Carolina.	Ohio.	Indiana.	West Virginia	Kentineky	Tomarion	In:	Hilbors.	lowa.	Missouri,	Nebraska.	Kansas.	Colorado.	l'tah.	Nevada.	California	Zouth Carolina	Countilly alound.	neorgia.	Alabama.	Florida.	Indian Territory	Arkansas.	Mississituri	Louisiana.	Texas.	New Mexico.	Arizona.	Remarks.
;	*			* ;	1		**	*		+			Y.	-,	+	*	*		*		÷	-	-	-	*		-				ļ.,	-	1	The more known the more esteemed.
ĩ	*			+ 1	*		*		١.	*			* 1			*	*				7	1.	.   .								ļ			
1	*		*	*			-	*			- j -	-1-				*					*	i.	-   -			-	i.,			1		'		Ranks with Beurre Bosc.
1	*				-																+	-		- 1	  !									
3 4	i (*)	*		*	*	- '	*	*		*			k	*	* '	*	*				*	-	1		-									Of superior quality.
3	*	*	,	*	*		*	*									-						 					1						But yet little known; promising.
)	*	**	* '	**	*	. '	*	**	*	*		*	* -	.,	* *	. * :	**		**		*	1		-	+ !			-						
2 3	**		* 4	kok:	* -		*	* *		*					*	* -	*				١.,						-	11:		1				A hardy tree.
4 5	*	* ':	*	*	* -	- :	k *	*			-	1		-	*						1 *	١.,		-   -		:				-				One of the most profitable for market.
11	*	/ .		* -	*	-	*	*	*	   *				* .	*	*					*													
8				_1_	-1-							1		-1	-															Í			1	
9 () 1	¥ 6	* -	- -	*	*	- 4	*	*				·	-   -	- -	-										-	-								Of rare excellence; requires age ere profitable. Of poor quality, but profitable for market.

## XIII.-PLUMS.

The columns explain: Size—L, large; m, medium; s, small. Form—r, roundish; o, oval; r, o,, roundish oval; o, ob,, oval obovate. Color—p,, purplish or very dark; r, reddish or copper color; y,, yellow; g, y,, greenish yellow; y, r,, yellowish with shades or spots of red. QUALITY—g,, good; v, g,, very good; b,, best. USE—F,, family; M., market Season—E,, early; M., medium; L,, late Origin—Am,, American; F., Foreign.

				DES	CRIP	TION.			I.	_:	\orl	her	n B	ivls	inn-	-be	twe	en 4	e° a	nd 49
NUMBER.	NAMES.	YIZE.	Ровм.	Содов.	QUALITY.	Use.	SEASON.	ORIGIN.	Nova Scotia	New Bronswick.	New Hampshire.	Vermont.	Massachusetts. Rhode Island.	Connecticut	New York. Ontario.	Michigan	Minnesota.	Dakota. Montana	Wyoming.	idaho. Washington.
1	Bavay's Green Gage	1	r.	g, y,	b.	F.	L.	F.					Ψ	* :	FY	* , .		-,-		
	Reim Claude de Bavay. Bleeker's Gage	111.	r. o.	y.	V. g.	F.M.	М.	Am.		1										
	Bradshaw.	1.			2.	М.	M.	Am							#		-			
4	Bryanstone Gage		Ο,	y. r.	v. g.	F.	L.	F.					į.		÷ -					
- 5	Chickasaw		r.	V. r.	2.	М.	Ī.	Ant												
6	Coe's Late Red		Γ.	p.	V. 11.	F.M.	L.	F.				1							1	
2	Coe's Golden Drop	Ī.	θ,	v.r.	V. g.	F.M.	L.	17.		Ĩ.,		+		-						11
- 8	Columbia	i.	Γ,	10.	g.	М.	M.	$\Delta m$			*	-	- 4	4	* *	*				
9	Damson	ς.	0.	p.	g.	M.	1	Am												
10	Domine Dull		0.	p.	g.	М.	M.	Am.	-											
ii -	Duane's Purple	1.	0.	r. p.	g.	F.M.	E.	Am.			111									
12	Early Favorite	5.	r. o.	p,	g.	Μ,	E.	F.					-							
13	German Prune	1	0.	11.	g.	F.M.	M.	F.							*					
14	General Hand	1.	r. o.	gv	2	F.M.	M	Am.							-					
15	Green Gage		Γ.	g. v.	. ĥ	F.	M.	F.							7					
16	Huling's Superb	- 1	r. o.	2. Y	g.	F.M.	M.	Am.				1	٠.	_	- 1			,		
17	Imperial Gage	i.	ο.	4. 3.	Б,	F.M.	M.	Am.				1							1	
Îs .	Italian Prune Follenburg		ο,	p.	Ľ.	F.M.	М.	F.					-		*					
19 .	Jefferson	1	Ο,	y, r.	ъ.	F.M.	M.	Am						sk :	* ×					
20 1	July Green Gage	111	r.	y. r.	Vg.	F.	E.	F.							*					
21	Lawrence's Favorite		r.	g y.	h	F.M.		Am.				l *		* .	** *		.,			
1313	Lombard	m,	r. o.	r. p.	£7.	Μ	М.	Am.				. *	*	*	* *	* 1 -	- *		.	
23	McLaughlin		Γ	у. г.	h,	F.M.	М.	Am.			+	' k	*	* 1						
24	Monroe	m.	11,	g. y.	E.	Μ.	М.	Am.							*					
2.3	Peach Plum	1.	r.	p,	2.	М.	E.	F.					*		*					
26	Pond's Seedling	1.	0.	у. г.	Ľ.	М.	М	F.					+ , .		+ .	ſ				
137	Prince Engelbert	ì.	Ο,	p.	V. g.	F.M.	М.	F.					+		+ .	,				
28	Prince's Yellow Gage	111.	Ο,	ÿ.	v.g.	F.M.	E.	Am.	١ .			*	* *	*	*	*				
1214	Prune d'Agen	m.	Ο,	ju.	b	F.	М.	F.	:						×					
30	Purple Gage		r	js.	vg.	F.M.	М.						*	yle.	*					
31	Purple Favorite		r. oh.	D.	Ъ,	F.M.	E.	Am.							F %					
13:3	Quackenboss	1	r,	D.	g.	М.	М.	Am,							*					
33	Royale Hative		Γ.	p.	٧. ٢.	FM.	E.	F.				·			*					
31	Royale d'Tours		r.	r.	ur.	М.	E.	F.	'		- ,				+					
35	Smith's Orleans		0.	г. р.	v.g.	F.M.	M	Am			- '-			Ψ	* *					
36	St. Catharine		ob.	g. y.	vg.	М.	L.	F.							*		. '			
37	St. Martin's Quetsche		Ο,	g. y.	T.	М.	14.	F.		;-	- +									
	Sharp's Emperor		r. o.	y. r.	ц.	М.	М.	F.							*					
39	Transparent Gage			g.y.	V . #	F.	М.	F							+					
40	Wangenheim			p.	g.	М.	М.	F.							+					
4 I	Washington	1.	r. o.	g.y.	V. 2	F.M.	м.	Am.			*	+	+ +	*	* *	*				'
42	Wild Goose		r.	у. г.	Ľ.	М.	М.	Am.								,				
43	Yellow Egg	1	0.	у.	ц.	F.M.	$M_{-}$								* *	*				
	White Magnum Bonum,																			

## XIV.-QUINCES.

The columns explain: Size-L, large; m., medium; v 1, very large. Form -ob. p., oblate pyriform; r., roundish; r ob. p., roundish obtuse pyriform. Color-y., yellowish or yellowish green. Qv vlitv t, tender; h, t., balf tender. Use K., kitchen; M., market. Season E., early; E. to L., early to late. Origin -Am, American; F., foreign.

			DESCRIPTION.	1Northern Division-between 42° and 49°
NUMBER.	NAMES.	SIZE. FORM,	Colore.  QUALITY.  FSE.  SEASON.	Outern, Nova Scotia, Nova Scotia, Maine, Maine, Massachusetts, Massachusetts, Vermont, Massachusetts, Massachusetts, Miscousin, Misc
1 2 3 4	Angers Apple or Orange Portugal Rea's Seedling	v.l. ob.p. l. r. v.l. olep l. web.p	y h.t. M.K. F. to t	F

#### XIII.-PLUMS.

The columns explain: Size—L, large; m., medium; s., small. Form—r., roundish; o., oval; r. o., roundish oval; o. ob., oval obovate. Color—p., purplish or very dark; r., reddish or copper color; y., yellow; g. y., greenish yellow; y. r., yellowish with shades or spots of red. Quality—g., good: v. g., very good; b., best. Use—F., family; M., market. Season—E., early; M., medium; L., late. Origin—Am., American; F., Foreign.

	រភិ <sup>o</sup>	280 & 3	-b.	Div.	ih. I	Soul	111-	420	and	35°	een	etwe	n—h	isio	Div	tral	('en	1	_ 1
Remarks.	Arizona.	Texas. New Mexico.	Mississippi.	Arkansas.	Florida. Indian Territory.	Mabama.	South Carolina. Georgia	Nevada. California.	Colorado. Utah.	Kansas.	Missouri.	Ilmois. Iowa.	Kentucky. Tennessee.	West Virginia.	Ohio.	North Carolina.	Maryland & D. C.	Delaware.	Venusylvania.
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## XIV.-QUINCES.

The column explain: Size—L, large; m., medium; v. l., very large. Form—ob. p., oblate pyriform; r., roundish; r. ob. p., roundish obtuse pyriform. Colon—y., yellowish or yellowish green. QUALITY—t., tender; h. t., half tender. Use—K., kitchen; M., market. Season—E., early; E. to L., early to late. Origin—Am., American; F., foreign.

NUMBER, Pennsylvania New Jersey. Number of pelaware. Number of pel	Remarks.
1 *	

#### XV.-RASPBERRIES.

The columns explain: Size—L, large; m., medium; s., small. Form—r., roundish; r. c., roundish conical; c., conical; ob. c., obtuse conical. Color—b., black; r., reddish; p., purplish; y., yellow. QUALITY—g., good; v. g., very good; h., best. Use—M., most profitable for market; F. M., of value for family and market; F., mostly valued for the family dessert. Season—E., early; L., late; M., medium. Origin—Am., American; F., Foreign.

				DES	CRIP	TION.			L	-N	orth	ern	Div	isio	n—b	etwo	en -	12° a	nd 4	9°
Мумвек.	NAMES.	SIZE.	FORM.	Coron.	QUALITY.	T.S.E.	SEASON.	ORIGIN.	Nova Scutia.	Maine.	New Hampshire.	Massarhusetts.	Rhode Island.	New York.	Ontario. Michigan.	Wisconsin.	Dakota.	Montana.	Idaho.	Oregon.
1 2 3 4 5 6 7 8 9 10 11 12	American Black Belle de Palluan Belle de Fontenay Catawissa. Clarke Fastolf. Franconia. French Hornet. Hudson River Antwerp. Knevett's Giant. Merveille de 4 Saisons.	1 m, m. l. l. m. l.	r. c. r. r. r. r. r. r. c. c. c. c. r.	b. r. r. p. r. p. r. r. r. r. r. r. r. r. r.	7. v.g. v.g. b. v.g. b. v.g. b. v.g. v.g.	M F. F. F.M. F. F.M. F.M. F.M.	M. M. L. E. M. M. M. M. M. M. M. L.	Am. F. Am. Am. F. Am. F. Am. F. Am. F. Am. F.		*			* * * * * * * * * * * * * * * * * * * *	- * * * * * * * * * * * * * * * * * * *	* * *					
13 14 15 16 17	October Red, McCormick Mammoth Cluster. Orange Ohio Everbearing Philadelphia Purple Cane	1. m. m.	c. c. r.	b. y. b. p. p.	v.g. b. g. g.	F.M. F.M. M. M.	L. M. L. M. M.	Am. Am. Am. Am. Am.		*		*	* :	* *	* *	*				

#### XVI-STRAWBERRIES.

The columns explain: Size—L, large; s., small; m., medium. Sex—H., Hermaphrodite; P., Pistillate; S., Staminate. Color—d. c., deep crimso; d. s., deep scarlet; b. s., bright scarlet; w. t., whitish tinted with red; l. c., light crimson. Form—r. c., roundish conical; o. c., obtuse conical or coxcomb form; c., conical; r., roundish; r. o. c., roundish obtuse conical. Flesh—s., soft; f., firm Season—E., early; M., medium; L., late; E. L. early to late. Origin—Am., American; F., Foreign.

CMBEn.							,											
Z	NAMES.	SIZE.	SEX.	Color.	FORM.	Flesh.	SEASON.	ORIGIN.	Nova Scotia New Propagatel	Maine New Harman	Vermont.	Rhode Island.	Connecticut.   New York.	Ontario Michigan.	Wisconsin.   Minnesota.	Dakota	Wyoming.	Idano. Washington. Oregon.
2 Bost 3 Chai 4 Dow 5 Filh 6 Gree 7 Hoy 8 Ida 9 Jent 10 Juct H Ken 12 Larr 13 Lent 14 Lont 15 Nics 16 Pres 17 Trio	iculturist on Pine cles Downing mer's Prolific nore en Prolific ey's Seedling iy Lind mda tucky te Early Scarlet nig's White gworth's Prolific nor ident Wilder implie de Gand oria.	1. m. m. 1 l. m. m. 1. l. s. l. l. m. 1. l. l. l. m. 1. l. l. l. m. l. l. l. l. m. l.	P. H.	d.c., d.c., d.s., b.s., b.s., d.s., d.s., d.s., b.s.,	F.C. F.C. C. F.C. C. F.C. C. F.C. C. C. F.C. C.	f. f. s. f. s. f. f. f. s. s. f.	E. M. M. L. M. E. L. L. L. E. M. L. M. E. L. L. L. E. M. L. M. E. L. L. L. L. L. L. L. M. E. L. M. E. L. M.	Am. Am. Am. Am. Am. Am. Am. Am. Am. Am.		*	- * :	************	* * * * * * * * * * * * * * * * * * * *	* *	*			

#### XV.-RASPBERRIES.

The columns explain: Size-L, large; in., medium; s., small. Form r., roundish; r.c., roundish conical; c., conical; ob c., obtuse conical. Color b., black; r., reddish; p., purplish; y., vellow. QUALITY-g., good; v.g., very good; b., best Use-M., most profitable for market; F. M., of value for family and market; F., mostly valued for the family dessert. Season- E., early; L., late; M., medium. Origin Am., American; F., Foreign.

		11		-1	er	tr	al	Di	vi	sic	on-	}	et	we	en	3	50	an	d	42	Ų.		11	1-3	Son	utl	h. i	div	l	0.2	5º,	æS	50	
NUMBER.	Pennsylvania.	New Jersey.	Delaware.	Maryland & D. C.	Virginia.	North Carolina	Ohio.	Tradition	West Vinesinia	West MEIIIIa.	Kentacky.	Tennessee.	Illipois.	lowa,	Missouri.	Nebraska,	Kansas,	Colorada.	Utah.	Nevada	A bulli Committee	cantornia.	South Carolina.	Georgia,	Alabama.	Plorida.	Indian Territory.	Arkansas,	Mississippi,	Louisiana.	Texas.	New Mexico.	Arizona.	Remarks.
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12	*			*			*	-																										Not profitable.
3	*	*	*	*	*		*	4		r	*	*	*	k	*	*	*		*															Profitable market sort.
4  5  6  7	* *	* * *	*	*	*		*	+	- 1	k	*		t	*	le:	skr	de		sk															Valued for family use Not profitable. Very productive. An old variety, by many thought to be superseded.

#### XVI-STRAWBERRIES.

The columns explain: Size-1, large; s., small; m., medium. Sex-H., Hermaphrodite; P., Pistillate; S., Staminate. Color-d. c., deep crimson; d. s., deep scarlet; b. s., bright scarlet; w. t., whitish tinted with red; l. c., light crimson. Form-r. c., roundish conical; o. c., obtuse conical or coxcomb form; c., conical; r., roundish; r. o. c., roundish obtuse conical. Flesh-s., soft; f., firm. Season--E., early; M., medium; L., late; E. L., early to late. Origin-Am., American; F., Foreign.

-		П.	-	Cer	itra	l D	ivi	sior	-b	etw	een	35	an	d 4	3°	i	П.	Se	out	h.	-bI	div.	.280	£3.	5	
NUMBER.	Pennsylvania	New Jersey.	Delaware.	Maryland & D. C.	North Carolina.	Ohio,	Indiana.	West Virginia. Kentucky,	Tennessee.	Illimois.	Missouri.	Nebraska.	Kansas, Colorado,	Utah.	Nevada.	California.	Court arolina.	Alabana.	Florida.	Indian Territory.	Arkansas.	Mississippi.	Texas.	New Mexico.	Arizona.	Remarks.
1 2 3 4 5	*	* *	* *	F 3		*	* -	**		*	*	*	+	*		+	-  4  -  -  -  -	+ *  + *				*				
6 7 8 9	*	*	* :	* :	r	* * * * * * * * * * * * * * * * * * * *	*		*	**	*	**	*									*				An old highly valued sort Very productive.
11 12 13 14	* * * *	† * **		f .		*		. *1	r 	*		*	+	+		*	+	. ' r				*	· · · · · · · · · · · · · · · · · · ·			Only valued for the amateur
15 16 17 18	*	*	*	* - * j- * -		* * *	*			* ; .		*	+ + <sub> -</sub> . *	*			- 1 -									Extra for canning.
19	+	**	** -	*	*	**	*			** *	*	** 1	r#	*		** *	r* +	* *	*	ļ	-	* -	1			



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